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FIGURE 3176

MATLKDQLIYNLLKEEQTPQNKITVVGVGAVGMACAISILMKDLADELALVDVIEDKLGEMMDLQHGSIFLRTP
KIVSGKDYNVTANSKLVIIITAGARQQEGESRLNLVQRNVNIFKFIIPNVVKYSPNCKLLIVSNPVDILTYVAWKI
SGFPKNRVIGSGCNLDSARFRYLMGERLGVHPLSCHGWVLGEHGDSSVPVWSGMNVAGVSLKTLHPDLGTDKDKE
QWKEVHKQVVESAYEVIKLGKGYTSWAI GLSVADLAESIMKNLRRVHPVSTMIKGLYGIKDDVFLSVP CILGQNGI
SDLVKVILTSEEEARLKKSADTLWGIQKELQF

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FIGURE 3177

ATGCCCAGTGCCATTAGCACCAAGTGTTGCCTGTCCATCCTGTGGCCTACCATCTGGTATTACTGCAGCCATGCA
GGATCCCTGTCAATGATCATGTGTGCTCTTCTCTGGGCCCTATCCCTGCTGCTGAAATTCCCTGGAGGGCAATCTT
GGAAACAATGGCAACAAGACCGAATTGGAACGGGCTTTTGGCTACTATGGACCACTCCAAAGTGTGTGGGTTGCT
AGAAACCCATCTGGCTTTGCTTTTGTGTAATTTGAAGATCCCCGAGATGCGGCTGATGCAGTTCCATCCCCGAGA
GCTAAATGGAAGAACACTATGTGGCTGCTGTATGATTATCGTAGGAGTAGTCCTCCACCTCGTCGCAGATCTCCA
AGAAGGAGAAGCTTCTCTCACAGCTGGAGCAGGTCCCTTTCTAGAGATGGGAGAAGAGAGAGGTCGCTGTCCTCGG
GAGAGAAATCACAAGCCGTCCCGATCCTTCTCTAGGTCTCGTAGCCGATCTAGGTCAAATGAAAGGAAATAG

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FIGURE 3178

ACCACAAATCAGGCCGGACAGGAGAGGGAGGGGTGGGGGACAGTGGGTGGGCATTGAGACTGCCAGCACTTTGCT
ATCTACAGCCGGGGCTCCCGAGCGGCAGAAAGTTCCGGCCACTCTCTGCCGCTTGGGTTGGGCGAAGCCAGGACC
GTGCCGCGCCACCGCCAGGATATGGAGCTACTGTGCGCCACCGCTCCGCGACGTAGACCTGACGGCCCCGACGGC
TCTCTGTCTCCTTTGCCACAACGGACGACTTCTATGACGACCCGTGTTTCGACTCCCCGGACCTGCGCTTCTTC
GAAGACCTGGACCCGCGCCTGATGCACGTGGGCGCGCTCCTGAAACCCGAAGAGCACTGCACTTCCCCGCGGCG
GTGCACCCGGCCCCGGGCGCACGTGAGGACGAGCATGTGCGCGCGCCAGCGGGCACCACCAGGCGGGCCGCTGC
CTACTGTGGGCTGCAAGGCGTGCAAGCGCAAGACCACCAACGCCGACCGCCGCAAGGCCGCCACCATGCGCGAG
CGGCGCGCCTGAGCAAAGTAAATGAGGCCTTTGAGACACTCAAGCGCTGCACGTCGAGCAATCCAAACCAGCGG
TTGCCCAAGGTGGAGATCCTGCGCAACGCCATCCGCTATATCGAGGGCCTGCAGGCTCTGCTGCGCGACCAGGAC
GCCGCGCCCCCTGGCGCCGACGCCCTTCTATGCGCCGGGCCCCGCTGCCCCCGGGCCGCGCGGCGAGCACTAC
AGCGGCGACTCCGACGCGTCCAGCCCGCGCTCCAAGTCTCCGACGGCATGATGGACTACAGCGGCCCCCGAGC
GGCGCCCGGGCGGGAAGTGTACGAAGGCGCCTACTACAACGAGGCGCCAGCGAACCAGGCCCCGGAAGAGT
GCGGCGGTGTGAGCCTAGACTGCCTGTCCAGCATCGTGGAGCGCATCTCCACCGAGAGCCCTGCGGCGCCCGCC
CTCCTGCTGGCGGACGTGCCTTCTGAGTCGCCTCCGCGCAGGCAAGAGGCTGCCGCCCCAGCGAGGGAGAGAGC
AGCGGCGACCCACCCAGTCACCGGACGCCGCCCGCAGTGCCCTGCGGGTGCGAACCCCAACCCGATATACCAG
GTGCTCTGAGGGGATGGTGGCCGCCACCCGCCGAGGGATGGTGCCCTAGGGTCCCTCGCGCCAAAAGATTG
AACTTAAATGCCCCCTCCCAACAGCGCTTTAAAAGCGACCTCTCTGAGGTAGGAGAGGCGGGAGAAGTGAAGT
TTCCGCCCCCGCCCCACAGGGCAAGGACACAGCGCGTTTTTTCCACGCAGCACCTTCTCGGAGACCCATTGCG
ATGGCCGCTCCGTGTTCTCGGTGGGCCAGAGCTGAACCTGAGGGGCTAGGTTGAGCTTCTCGCGCCCTCCCC
CATGGGGGTGAGACCCTCGCAGACCTAAGCCCTGCCCCGGGATGCACCGGTATTTGGGGGGGCGTGAGACCCAG
TGCACTCCGGTCCCAAATGTAGCAGGTGTAACCGTAACCCACCCCAACCGTTTCCCGGTTGAGGACCACTTTT
TGTAATACTTTTGTAACTATTCCGTGTAATAAGAGTTGCTTTGCCAGAGCAGGAGCCCCCTGGGGCTGTATTTAT
CTCTGAGGCATGGTGTGTGGTGCTACAGGGAATTTGTACGTTTATACCGCAGGCGGGCGAGCCGCGGGCGCTCGC
TCAGGTGATCAAAATAAAGGCGCTAATTTATA

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FIGURE 3179

MELLSPPLRDVDLTAPDGSLSFATDDFYDDPCFDSFDLRFEDLDPRLMHVGALLKPEEHSHPAAVHPAPGA
REDEHVRAPSGHHQAGRCLLWACKACKRKT TNADRRKAATMRERRRLSKVNEAFETLKRCTSSNPQNQLPKVEIL
RNAIRYIEGLQALLRDQDAAPP GAAAFYAPGPLPPGRGGEHYSGSDASSPRSNCS DGMDYSGPPSGARRRNC
YEGAYYNEAPSEPRPGKSAAVSSLDCLSSIVERISTESPAAPALLLADVPSPPRRQEAAAPSEGESSGDPTQS
PDAAPQCPAGANPNPIYQVL

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FIGURE 3180

AGTTGCTTCAGCATCCTGGTGTGCTGTGCCGTGGGTCTGTGCGGTCACTTAGCCAAGATGCCTGAGGAAACCC
AGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACATTCGCCTTTCAGGCAGAAATTGCCAGTTGATGT
CATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCAT
TGGACAAAATCTGGTATGAAAGCTTGACAGATCCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTTA
TACCAACAAAACAAGATCAAACCTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAATA
ACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATGA
TTGGCCAGTTCCGGTGTAGTTTTATTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAACATAATG
ATGATGAGCAGTACGCCCTGGGAGTCCTCAGCAGGGGGATCATTACAGTGAGGACAGACACAGGTGAACGTATGG
GTCGTGGAACAAAAGGTATCCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACAAAGAATAAAGGAGA
TTGTGAAGAAACATTCTCAGCTTATTGGATATCCCATTACTCTTTTTGTGGAGAAGGAATGTGATAAAGAAGTCA
CGACGATGAGACTGAAGAAAAGGAAGACAAAGAAGAAGAAAAAGAAAAAGAGAGTCCAAAGACAAAC
CTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAAAAGAGGATGGTGACAAGAAGAAGAAGACTAAGG
AAAAGTACATCGACCAAGAAGAACTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCAGCATATTACTAATG
AGGAGTACGGAGAATTCTGCAAGAACTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTTCAGTTG
AAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCATGACGTGCTCCTTTTTGACCTGTTTGAAAACAGAAAGA
AAAAGAACAACATCAAATTGTATGTACGCAGAGATTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAATATC
TGAACCTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATTTCCCGTGAGATGTTGCAACAAAGTA
AAATTTTGAAAGTTATCAGGAAAAATTTGGTCAAAAAATGCTTAGAACTCTTACAGAACTGGCGGAAGATAAAG
AGAACTGCAAGAAATTCATGAGCAGTTCTCTAAAAACATAAAGCTTGAATACAAGAAGACTCTCAAAATCGGA
AGAAGCTTTCAGAGCTGTTAAGGTACTACACGTCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTACTGCA
CCAGAATGAAGGAAAAACAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAATCAGCCT
TTGTGGAACGTCTTGGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTCCAAC
AGCTGAAGGAATTGAGGGGAAGACTTTAGTGCCAGTCACCAAGAAGGCCTGGAACCTCCAGAGGATGAAGAAA
AGAAAAAGAAATAGGAAGAGAAAAACAATGTTGAGAACCTCTGCAAAACCATGAAAGACATATTGGAGAAAAA
AGTTGAAAAGGTGGTTGTGTCAAACCGATTGGTGACGTCTCCATGCTGTATTGTGACAAAGCACATATGGCTGGAC
AGAAAACATGGAGAGAAATCATGAAAGCTCAAGCCCTAAGAGACAACCTCAACAATGGGTTATATGGCAGCCAAGAA
ACACCTGGAGATAAATCCTGATGATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAATGACAA
GTCTGTGAAGGATCTGCTCATCTTGCTTTACGAACTGCACTCCTGTCTTCTGGCTTCAGTCTGGAAGATCCCCA
GACACATGCTAACAGGACCTACAGGATGATCAAACCTGGTCTGGGTATTGATGAAGATGATCCTGCTGCTGATGA
TACCAGTGCTGCTGTAACCTGAAGAAATGCCGCCCTCGAAGGAGATGACGACACATCATGCATGGAAGAAGTAGA
CTAACCTCTGGCTAAGGGATGACTTAACCTGTTCAATACCTACAATTCCTCCGATAATATATATTCAAGGATGTT
TTTCTTTATTTTGTAAATATTAAGTCTGTACGGCATGACAACAACCTACTTTAAGGGGAAGATAAGATTTCT
GTCTACTAAGTGATGCTGTGATACCTTAGGCACTAAAGCAGAGCTAGTAATGCTTTTTGAGTTTCACGTCGGTTT
ATTTTCACAGATTGGGGTAACGTGCGTTGTAAGATGTATGTAACATGATGTTAACTTTGTGGTCTAAAGTGTTTA
GCTGTCAAGCCGGATTCTTAAGTAGACCAAATCTTGTTATCGAAGTGTTCTGAGCTATACCTTGATGTTTAGAA
AAGTATTTGTTACATCTTGTAGGATCTACTTTTGAACCTTTTCATCCCTATAGTTGACAATTCGTCATGTACTA
GTCCTCTAGAAATAGGTTAACTGAAGCAACTTGATGGAAGGATCTCTCCACAGGGCTTGTTCCTCAAGAAAAG
TATTGTTTGGAGGAGCAAAGTTATAAGCCTACCTAAGCATATCATAAAGCTGTTTAAAAATAACTCAGACCCGGT
CTTGTGGATGGAATGTAGTGCTCGAGTCACATTCCTTCTATAGTTGTAACAAATACAGATGAGT

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FIGURE 3181

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYNSKEIFLRELI SNSSDALDKIWYESLTDPSKLD SGKE
LHINLIPNKQDQTLTIVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVSFY SAYLVAEKVTV
ITKHNDDEQYAWESSAGGSFTVRIDTGERMGRGTKVILHLKEDQTEYLEEQRIKEIVKKHSQLIGYPITLFVEKE
CDKEVSDDETEEDKEDKEEEEKEEEKESKDKPEIEDVGSDEEEEKKDGDKKKKKTKEYIDQEELNKTKPIWTRNP
DDITNEEYGEFYKNLTNDWEDHLAVKHFSVEGQLEFRALLFVP

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FIGURE 3182

GGTGTTGCTGTGCCGTGGGTCCTGTGCGGTCACCTTAGCCAAGATGCCTGAGGAAACCCAGACCCAAGACCAACCG
ATGGAGGAGGAGGAGGTTGAGACATTCGCCTTTCAGGCAGAAATTGCCCAGTTGATGTCATTGATCATCAATACT
TTCTACTCGAACAAAGAGATCTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCATTGGACCTGCATATTAACT
CTTATACCAAAACAACAAGATCAAACCTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATC
AATAACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCT
ATGATTGGCCAGTTCGGTGTTAGTTTTTATTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACAT
AATGATGATGAGATACCAGTGCTGCTGTAAGTGAAGAAATGCCGCCCTCGAAGGAGATGACGACACATCATGCA
TGGAAGAAGTAGACTAACCTCTGGCTAAGGGATGACTTAACTGTTCA

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FIGURE 3183

ACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTCAGTTGAAGGACAGTTGGAATTCAGAGCCCTTCTA
TTTGTCCCATGACGTGCTCCTTTTGACCTGTTTGAAAACAGAAAGAAAAAGAACAACATCAAATTGTATGTACGC
AGAGATTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAATATCTGAAC TTCATTAGAGGGGTGGTAGACTCG
GAGGATCTCCCTCTAAACATTTCCCGTGAGATGTTGCAACAAAGTAAAATTTTGAAAGTTATCAGGAAAAATTTG
GTCAAAAAATGCTTAGAACTCTTTACAGAACTGGCGGAAGATAAAGAGAACTGCAAGAAATTCATGAGCAGTTC
TCTAAAAACATAAAGCTTGGAATACAAGAAGACTCTCAAAATCGGAAGAAGCTTTCAGAGCTGTTAAGGTACTAC
ACGTCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTACTGCACCAGAATGAAGGAAAAACAGAAACATATC
TATTATATCACAGGTGAGACCAAGGACCAGGTAGCTGAGGGGAAGACTTTAGTGCCAGTCACCAAAGAAGGCCTG
GAACTTCCAGAGGATGAAGAAAAGAAAAAGAAATAGGAAGAGAAAAACAATGTTTGAGAACCTCTGCAAAATCA
TGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTATATGGCAGCCAAGAAACACCTGGAGATAAATCCTG
ATGATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAATGACAAGTCTGTGAAGGATCTGCTCA
TCTTGCTTTACGAACTGCACTCCTGTCTTCTGGCTTCAGTCTGGAAGATCCCCAGACACATGCTAACAGGACCT
ACAGGATGATC

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FIGURE 3184

GGAATGTGATAAAGAAGTCAGCGACGATGAGACTGAAGAAAAGGAAGACAAAGAAGAAGAAAAAGAAAAAGAAGA
GAAAGAGTCCAAAGACAAACCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAAAGAAGGATGGTGACAA
GAAGAAGAAGAAGACTAAGGAAAAGTACATCGACCAAGAAGAAGCTCAACAAAACAAAGCCCATCTGGACCAGAAA
TCCCGACGATATTACTAATGAGGAGTACGGAGAATTCTGCAAGAAGTTGACCAATGACTGGGAAGATCACTTGGC
AGTGAAGCATGAAAAATTTGGTCAAAAAATGCTTAGAACTCTTTACAGAAGTGGCGGAAGATAAAGAGAAGTGA
AGAAATTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGGAATACAAGAAGACTCTCAAAATCGGAAGAAGCTTT
CAGAGCTGTTAAGGTACTACACGTCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTACTGCACCAGAATGA
AGGAAAAACAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCAGCCTTTGTGGAAC
GTCTTGGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTCCAACAGCTGAAGG
AATTTGAGGGGAAGACTTTAGTGCCAGTCACCAAAGAAGGCCTGGAAGTTCCAGAGGATGAAGAAAAGAAAAAGA
AATAGGAAGAGAAAAACAATGTTTGAGAACCTCTGCAAAACCATGAAAGACATATTGGAGAAAAACAAGCACA
TATGGCTGGACAGAAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAAGTCAACAATGGGTTATATG
GCAGCCAAGAAACACCTGGAGATAAATCCTGATGATTCCATTAT

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FIGURE 3185

GGTCGGCGTGGTCTTGCGAGTGGAGTGTCCGCTGTGCCCGGGCCTGCACCATGAGCGTCCCGGCCCTTCATCGACA
TCAGTGAAGAAGATCAGGCTGCTGAGCTTCGTGCTTATCTGAAATCTAAAGGAGCTGAGATTTCAGAAGAGAACT
CGGAAGGTGGACTTCATGTTGATTTAGCTCAAATTATTGAAGCCTGTGATGTGTGTCTGAAGGAGGATGATAAAG
ATGTTGAAAGTGTGATGAACAGTGTGGTATCCCTACTCTTGATCCTGGAACCAGACAAGCAAGAAGCTTTGATTG
AAAGCCTATGTGAAAAGCTGGTCAAATTTCCGGAAGGTGAACGCCCTCTCTGAGACTGCAGTTGTTAAGCAACC
TTTTCCACGGGATGGATAAGAATACTCCTGTAAGATACACAGTGTATTGCAGCCTTATTAAAGTGGCAGCATCTT
GTGGGGCCATCCAGTACATCCCAACTGAGCTGGATCAAGTTAGAAAATGGATTTCTGACTGGAATCTCACCCTG
AAAAAAGCACACCCCTTTTAAGACTACTTTATGAGGCACCTGTGGATTGTAAGAAGAGTGATGCTGCTTCAAAG
TCATGGTGGAAATTGCTCGGAAGTTACACAGAGGACAATGCTTCCCAGGCTCGAGTTGATGCCACAGGTGTATTG
TACGAGCATTGAAAGATCCAAATGCATTTCTTTTGACCACCTTCTTACTTTAAAACCAAGTCAAGTTTTTGAAG
GCGAGCTTATTCATGATCTTTTAACCATTTTTGTGAGTGCTAAATTGGCATCATATGTCAAGTTTTATCAGAATA
ATAAAGACTTCATTGATTCACTTGGCCTGTTACATGAACAGAATATGGCAAAAATGAGACTACTTACTTTTATGG
GAATGGCAGTAGAAAATAAGGAAATTTCTTTTGACACAATGCAGCAAGAACTTCAGATTGGAGCTGATGATGTTG
AAGCATTTGTTATTGACGCCGTAAGAACTAAAATGGTCTACTGCAAAATTGATCAGACCCAGAGAAAAGTAGTTG
TCAGTCATAGCACACATCGGACATTTGGAAAACAGCAGTGGCAACAACCTGTATGACACACTTAATGCCTGGAAAC
AAAATCTGAACAAAGTGAAAAACAGCCTTTTGAGTCTTTCTGATACCTGAGTTTTTATGCTTATAATTTTGTTC
TTTGAAAAAAGCCCTAAATCATAGTAAACATTATAAACTAAAAA

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FIGURE 3186

MSVPAFIDISEEDQAAELRAYLKSKGAEISEENSEGGLHVDLAQIIIEACDVCLKEDDKDVESVMNSVVSLLLLILE
PDKQEALIESLCEKLVKFREGERPSLRLQLLSNLFHGMDKNTPVRYTVYCSLIKVAASCGAIQYIPTELDQVRKW
ISDWNLTTEKKHTLLRLLYEALVDCKKSDAASKVMVELLGSYTEDNASQARVDAHRCIVRALKDPNAFLFDHLLT
LKPVKFLEGELIHDLLTIFVSAKLASYVKFYQNNKDFIDSLGLLHEQNMAKMRLLTFMGMAMVENKEISFDTMQQE
LQIGADDVEAFVIDAVRTKMVYCKIDQTQRKVVSHTHRTFGKQWQQLYDTLNAWKQNLNKVNSLLSLSDT

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FIGURE 3187

AAAAACTGCAGCCAACTTCCGAGGCAGCCTCATTGCCAGCGGACCCAGCCTCTGCCAGGTTCCGGTCCGCCATC
CTCGTCCCGTCTCCGCCGGCCCTGCCCGCGCCCAGGGATCCTCCAGCTCCTTTGCCCCGCGCCCTCCGTTCCG
CTCCGGACACCATGGACAAGTTTTTGGTGGCAGCAGCCTGGGGACTCTGCCTCGTGCCGCTGAGCCTGGCGCAGA
TCGATTTGAATATAACCTGCCGCTTTGCAGGTGTATTCCACGTGGAGAAAAATGGTCGCTACAGCATCTCTCGGA
CGGAGGCCGCTGACCTCTGCAAGGCTTTCAATAGCACCTTGCCACAATGGCCCAGATGGAGAAAGCTCTGAGCA
TCGGATTTGAGACCTGCAGGTATGGGTTCATAGAAGGGCAGTGGTGATTCCCCGGATCCACCCCACTCCATCT
GTGCAGCAAACAACACAGGGGTGTACATCCTCACATCCAACACCTCCCAGTATGACACATATTGCTTCAATGCTT
CAGCTCCACCTGAAGAAGATTGTACATCAGTCACAGACCTGCCCAATGCCTTTGATGGACCAATTACCATAACTA
TTGTTAACCGTGATGGCACCCGCTATGTCCAGAAAGGAGAATACAGAACGAATCCTGAAGACATCTACCCAGCA
ACCTTACTGATGATGACGTGAGCAGCGGCTCCTCCAGTGAAAGGAGCAGCACTTCAGGAGGTTACATCTTTTACA
CCTTTTCTACTGTACACCCCATCCAGACGAAGACAGTCCCTGGATCACCGACAGCACAGACAGAATCCCTGCTA
CCACTTTGATGAGCACTAGTGCTACAGCAACTGAGACAGCAACCAAGAGGCAAGAAACCTGGGATTGGTTTTTCAT
GGTTGTTTTCTACCATCAGAGTCAAAGAATCATCTTCACACAACAACAATGGCTGGTACGCTCTCAAATACCA
TCTCAGCAGGCTGGGAGCCAAATGAAGAAAATGAAGATGAAGAGACAGACACCTCAGTTTTTCTGGATCAGGCA
TTGATGATGATGAAGATTTTATCTCCAGCACCATTTCAACCACACCACGGGCTTTTGACCACACAAAACAGAAC
AGGACTGGACCCAGTGGAACCCAAGCCATTCAAATCCGGAAGTGCTACTTCAGACAACCACAAGGATGACTGATG
TAGACAGAAATGGCACCCTGCTTATGAAGGAACTGGAACCCAGAAGCACACCCTCCCTCATTACCATGAGC
ATCATGAGGAAGAAGAGACCCACATTCTACAAGCACAATCCAGGCAACTCCTAGTAGTACAACGGAAGAAACAG
CTACCCAGAAGGAACAGTGGTTTGGCAACAGATGGCATGAGGGATATCGCCAAACACCCAAAGAAGACTCCCATT
CGACAACAGGGACAGCTGCAGCCTCAGCTCATACCAGCCATCCAATGCAAGGAAGGACAACACCAAGCCCAGAGG
ACAGTTCCTGGACTGATTTCTTCAACCCAATCTCACACCCCATGGGACGAGGTTCATCAAGCAGGAAGAAGGATGG
ATATGGACTCCAGTCATAGTATAACGCTTCAGCCTACTGCAAATCCAAACACAGGTTTGGTGGAAGATTGGACA
GGACAGGACCTCTTTCAATGACAACGCAGCAGAGTAATTCTCAGAGCTTCTCTACATCACATGAAGGCTTGGAG
AAGATAAAGACCATCCAACAACCTTCTACTCTGACATCAAGCAATAGGAATGATGTCACAGGTGGAAGAAGAGACC
CAAATCATTCTGAAGGCTCAACTACTTTTACTGGAAGGTTATACCTCTCATTACCCACACACGAAGGAAAGCAGGA
CCTTCATCCCAGTGACCTCAGCTAAGACTGGGTCTTTTGGAGTTACTGCAGTTACTGTTGGAGATTCCAACCTCTA
ATGTCAATCGTTCCTTATCAGGAGACCAAGACACATTCCACCCCAAGTGGGGGGTCCCATACCACTCATGGATCTG
AATCAGATGGACACTCACATGGGAGTCAAGAAGGTGGAGCAAACACAACCTCTGGTCTATAAGGACACCCCAAA
TTCCAGAATGGCTGATCATCTTGGCATCCCTCTTGGCCTTGGCTTTGATTCTTGCAAGTTGCAATTGCAGTCAACA
GTCGAAGAAGGTGTGGGCAGAAGAAAAGCTAGTGATCAACAGTGGCAATGGAGCTGTGGAGGACAGAAAGCCAA
GTGGACTCAACGGAGAGGCCAGCAAGTCTCAGGAAATGGTGCATTTGGTGAACAAGGAGTCGTCAGAAACTCCAG
ACCAGTTTATGACAGCTGATGAGACAAGGAACCTGCAGAATGTGGACATGAAGATTGGGGGTGTAACACCTACACC
ATTATCTTGGAAAGAAACAACCGTTGGAAACATAACCATTACAGGGAGCTGGGACACTTAACAGATGCAATGTGC
TACTGATTGTTTCATTGCGAATCTTTTTTAGCATAAAATTTTCTACTCTTTTTGTTTTTGTGTTTTGTTCTTTA
AAGTCAGGTCCAATTTGTAAAAACAGCATTGCTTTCTGAAATTAGGGCCCAATTAATAATCAGCAAGAATTTGAT
CGTTCAGTTCCTCACTTGGAGGCCCTTTCATCCCTCGGGTGTGCTATGGATGGCTTCTAACAAAACTACACATAT
GTATTCCTGATCGCCAACCTTTCCCCACCAGCTAAGGACATTCCCAGGGTTAATAGGGCCTGGTCCCTGGGAG
GAAATTTGAATGGGTCCATTTTGCCCTTCCATAGCCCTAATCCCTGGGCATTGCTTCCACTGAGGTTGGGGGTTG
GGGTGTACTAGTTACACATCTTCAACAGACCCCTCTAGAAATTTTTCAGATGCTTCTGGGAGACACCCAAAGGG
TGAAGCTATTTATCTGTAGTAACTATTTATCTGTGTTTTTGAATATTAAACCTGGATCAGTCCTTTGATCAG
TATAATTTTTTAAAGTTACTTTGTGAGGACACAAAAGGGTTTAACTGATTCAATAAATATCTGTACTTCTT
CGATCTTC

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FIGURE 3188

ACTTGAGGGAGTAGGGGGCCGGGTTTGGGCCCTCAGTTGCTAAGGGCTACCCGAGTGGGAAGCGGTTCAAGAGAT
GGGGTGAAGGGTGGTTTACCGGTTCTTCAAGTCCTCAGCCTTCTGGCCCGCGGAAGTTAAGCAACCAAGAGGCGG
GCCTAAGACCGGAAGCAGGAAGGAGGGCGCAGGAAGCAGGGCGCCGAGCCTGTCGTACGGTCCTTCTGTGGGTC
TGTCGGTGCCGAGGGCAGGATCGAGAAGCTGCGGCTCCTGGGCCTCCGCTACCAGGAGTACGTGACTCGTCACCC
GGCCGCCACGGCCAGCTGGAGACAGCAGTGCGGGGCTTCAGTTACCTGCTGGCAGGTCGATTGCGCGATTGCGA
CGAGCTGTCAGAGCTGGTGTACTCTGCCTCTAACCTGCTTGTGCTGCTCAATGACGGGATCCTACGGAAGGAGCT
TCGGAAAAAGTTGCCTGTGTGCTGTCCCAGCAGAAGCTGCTGACATGGCTGAGCGTGCTGGAGTGCCTGGAGGT
GTTTCATGGAGATGGGAGCTGCCAAGGTGTGGGGTGAAGTGGGCCGCTGGCTTGTTCATCGCCCTCATCCAGCTGGC
CAAGGCTGTACTGCGGATGCTCCTGCTGCTCTGGTTCAAGGCTGGCCTCCAGACTTCACCCCTATCGTTCCACT
GGACAGAGAGACCCAGGCACAGCCCCCGATGGTGACCACAGCCCTGGCAACCATGAGCAGTCCTACGTGGGGAA
GCGGTCAAACCGGGTGGTGCGAACCTCCAGAACACGCCGTCCTGCACTCCAGGCACTGGGGAGCTCCCCAGCA
GCGGGAGGGACGGCAGCAGCAGCATCACGAGGAGCTGAGTGCGACCCCCACCCCCCTGGGGCTGCAGGAGACCAT
CGCAGAGTTTTTGTACATTGCCCCGCCGCTGCTGCACTTGCTCAGCCTGGGCCTGTGGGGTCAGAGGTCGTGGAA
ACCTTGGCTCTTGGCTGGTGTGTGGACGTGACCAGCCTGAGCCTCCTGAGTGACAGAAAGGGCCTGACCCGGAG
GGAGCGGGGAGCTGCGGCGCCGACCATCCTGCTGCTCTACTACCTGCTGCGCTCTCCTTTCTACGACCGCTT
CTCCGAGGCCAGGATCCTCTTCTGCTCCAGTTGCTGGCCGACCACGTCCTTGGCGTTGGCCTGGTCACAACGTC
CCAGCGTGCGCCTCTCCGTGCCTACCGGCCAGGCCCCACACACAGCCCTGGTCGCCACCAGCGTTTCTCCAGG
ACACCTTGACTGCGCTCTCCTGTGACGATGCCACTGCAGCCCCGACCTTGTCAGTCTGCTGGGCCAAGAAGCCTTC
ACTAGGAGTGGGATCCAGGCTCCTCTCCACAGAAAGCGGTGACTTCACCTCATGGAGCCCCGGGAAGCTGCTTGC
CTCGGCAGCCATAGGAGCGAACACTGCTGCTCTCTCGCTGGCCCCCTGGTGAGGACAGGAAGCCTGAACCCGGGTG
ATGGCTGAACGCTGCCAGCGTGTCTTCTGGCTGGGGCCCTCCGTCCTGCCCCCTTCTCCGAGGGCCCTGTGGCTC
TGGCAGCCCCAGGCCATGGCGTTGCCAGCCTCCCTGTGACAGAGCCTGGTGAACAGTGAGCCTGGCTCCCACGCA
AGTGGCACTTTAAGCCCTGCATCCTCGGTGAGAGTAAAAGGCTTTTCTCCCTTAAAAAAAAAAAAAAAAAAAAA
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FIGURE 3189

MEKLRLGLRYQEYVTRHPAATAQLETAVRGFSYLLAGRFADSHSELVYSASNLLVLLNDGILRKELRKKLPV
SLSQQKLLTWLSVLECVFEMGAAKVWGEVGRWLVIQIQLAKAVLRMLLLWFKAGLQTSPPIVPLDRETQA
QPPDGDHSPGNHEQSYVGKRSNRVVRTLQNTPSLHSRHWGAPQQREGRQQHHEELSATPTPLGLQETIAEFLYI
ARPLLHLLSLGLWGQRSWKPWLLAGVVDVTSLSLLSDRKGLTRRRERRELRRRTILLYYLLRSPPFYDRFSEARIL
FLLQLLADHVPGVGLVTTSQRAASPCLPARPHTQPWSPPAFLPGHP

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FIGURE 3190

ACTTGAGGGAGTAGGGGGCCGGGTTTGGGCCCTCAGTTGCTAAGGGCTACCCGAGTGGGAAGCGGTTCAAGAGAT
GGGGTGAAGGGTGGTTCACCGGTTCTTCAAGTCCTCAGCCTTCTGGCCCGCGGAAGTTAAGCAACCAAGAGGCGG
GCCTAAGACCGGAAGCAGGAAGGAGGGCGCAGGAAGCAGGGCGCCGAGCCTGTCGTACGGTCCTTCTGTGGGTC
TGTCGGTGCCGAGGGCAGGATCGAGAAGCTGCGGCTCCTGGGCCTCCGCTACCAGGAGTACGTGACTCGTCACCC
GGCCGCCACGGCCAGCTGGAGACAGCAGTGCGGGGCTTCAGTTACCTGCTGGCAGGTGATTGCGCGATTGCGA
CGAGCTGTCAGAGCTGGTGTA CTCTGCCTCTAACCTGCTTGTGCTGCTCAATGACGGGATCCTACGGAAGGAGCT
TCGGA AAAAGTTGCCTGTGTCGCTGTCCCAGCAGAAGCTGCTGACATGGCTGAGCGTGCTGGAGTGCGTGGAGGT
GTT CATGGAGATGGGAGCTGCCAAGGTGTGGGGTGAAGTGGGCCGCTGGCTTGT CATCGCCCTCATCCAGCTGGC
CAAGGCTGTACTGCGGATGCTCCTGCTGCTCTGGTTCAAGGCTGGCCTCCAGACTTCACCCCTATCGTTCCACT
GGACAGAGAGACCCAGGCACAGCCCCGGATGGTGACCACAGCCCTGGCAACCATGAGCAGTCCTACGTGGGGAA
GCGGTCAAACCGGGTGGTGCGAACCCCTCCAGAACACGCCGTCCTGCACTCCAGGCACTGGGGAGCTCCCCAGCA
GCGGGAGGGACGGCAGCAGCAGCATCACGAGGAGCTGAGTGCGACCCCAACCCCTGGGGCTGCAGGAGACCAT
CGCAGAGTTTTTGTACATTGCCCCGCCGCTGCTGCACTTGCTCAGCCTGGGCCTGTGGGGTCAGAGGTGCTGGAA
ACCC TGGCTCTTGGCTGGTGTTGTGGACGTGACCAGCCTGAGCCTCCTGAGTGACAGAAAGGGCCTGACCCGGAG
GGAGCGGCGGGAGCTGCGGCGCCGGACCATCCTGCTGCTCTACTACCTGCTGCGCTCTCCTTTCTACGACCGCTT
CTCCGAGGCCAGGATCCTCTTCCTGCTCCAGTTGCTGGCCGACCACGTCCCTGGCGTTGGCCTGGTCACAAGGCC
GCTCATGGATTACTTGGCCACCTGGCAGAAAATCTACTTCTACAGTTGGGGCTGACAGACCTCCCGGAAGGAGGG
TGTGGGGAGGGGTGGGGCAGGGAGCCCTCTCCCTAATAAAACTGACTCCGGCAGCGTCAAAAAAAAAAAAAA
AAAAAAAAAAAA

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FIGURE 3191

MEKLRLGLRYQEYVTRHPAATAQLETAVRGFSYLLAGRFADSHSELVYSASNLLVLLNDGILRKELRKKLPV
SLSQQKLLTWLSVLECVFEMEMGAAKVWGEVGRWLIALIQLAKAVLRMLLLLWFKAGLQTSPPIVPLDRETQA
QPPDGDHSPGNHEQSYVGKRSNRVVRTLQNTPSLHSRHWGAPQQREGRQQQHHEELSATPTPLGLQETIAEFLYI
ARPLLHLLSLGLWGQRSWKPWLLAGVVDVTSLSLLSDRKGLTRRERRELRRRTILLYYLLRSPFYDRFSEARIL
FLLQLLADHVPGVGLVTRPLMDYLPWQKIYFYSWG

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FIGURE 3192

AAGAAAAATTCAAAGTGGAGACAAGAACCATTGCTGTTGACTTTGCATCAGAAGATATTTATGATAAAAATTAAAA
CAGGCTTGGCTGGTCTTGAAATCGGCATCTTAGTGAACAACGTGGGAATGTCGTATGAGTATCCTGAATACTTTT
TGGATGTTCTGACTTGGACAATGTGATCAAGAAAATGATAAATATTAATATCTTTCTGTTTGTAAAGATGACAC
AATTGGTACTGCCTGGCATGGTGGAAAGATCCAAAGGGGCTATTCTGAACATTTCACTGCGCAGTGGCATGCTCC
CTGTCCCACTCTTGACCATCTATTCTGCAACCAAGACTTTTGTAGATTTCTTCTCTCAGTGCCCTCATGAGGAGT
ATAGGAGCAAGGGCGTCTTTGTGCAGAGTGTCTGCCATACTTCGTAGCTACAAAACAGTCGGCCTGCAATCCCGAAGC
CAACTTTGGATAAGCCCTCTCCGGAGACGTTTGTGAAGTCTGCAATTAAACAGTCGGCCTGCAATCCCGAAGC
ATGGATACCTGATCCATGCTCTTATGGGCTCGATAATCTCAAACCTGCCTTCTTGGATTTATTTGAAAAATAGTCA
TGAATATGAACAAGTCTACACGGGCTCACTATCTGAAGAAAACCAAGAAGAACTAAGCATTGATAACTGCATTGT
AACTTGGCCAGATGCTCCAGCATATGCACGTTCACTGCAAAGCACCCCTACTGGTTTTGAAAAATCTGACCTTGTCA
TTTCAATAGTTATTAACATGACTAAATATTATCTTAATTAAGAGGAAAAATAGAAGTTGCTTTTAGGGGTTTTCTGA
CATATATTCTGGATACTATCCGAGGTAATTTTGAAGTTTAATATAAATGCTCATATCAAATGAATATAGAACTAA
TATTGTGCGGAACACCTAATAGAAAGGAATACTATTATAGCAAATCACAGAATGATAGACTCAAGCATAAAACTT
GGCAGTTTTATCTGCTTCAAATGCCATTGATCATTATTCCTGTATTTTCTCTGAAACTGATTATAAAAAACCAAT
GTCCAGCTACTCTTTTGTCTTTTGACACTTGAAGAAATGGAGATCGATTTGATTTGTTTATAAGCAGACACACTGC
AATTTACAAAGATCTCTTTACGGTTTTATAAAATTATCTTCCAGTTTGTACATTTATATGGAATTGTTCTTTATC
AAGGGTAGCTAATGACATGAAAATAATTGTGAAATATGGAATTATTTCTGACACATGAAGCCCACTAAACTATGC
TTTCTTATAATGCATATTTCTTCTCAGTTTAAATGTATGTAATATCGAAGCTATATGGTATGATTTATAAAGAT
AAATGGGCCAAAGTGTACATTGAGACTGGCAGCCATCTATGGTACCACTGAAACCCTGACCCAGAAAAGTGGCTT
GCTTGGACACCCAGCTGCCTTTGTTTCTGCATTAAACCAATATTGATCACACATATGACACAGGCTAGTCTATA
AAAGTAATGACTTCATAGAAATGGCATTATAATTTTTAAGTTGATACTCTACAGGTAGCTATTGATATAATTAGT
TTTAATAAAACATGCTGCAACCATGGTATACAACAAAAATACATTTCTTTGGTGATTGAAATTAAGGCCGTATTT
ACAATGACTTAATATAAGACTGACTTTTATCCTGCTTCATAACTTGATGGAGAAGCTACCAAGAAAGAATTCAA
TACTGTGAAATATGCAGCAAGAAGATTGGTCTTTACCTAGGCTGTGTTTCTTAAGCTCTGAGTTTTCAGCACCAG
TAGATTTGTATTAAGAAAAAAGAAAAATGGGGCCTTAGCTTCTGGCTTTTAATTTTGCCAGCTAAGGACATAAAAC
AAAAATAAACAAACAAAAACAAATAGCCATCTGCTATCAGCATCATTATGTAAAGAAAAATATATTTTAGCCCT
AAAATTAGGAAGAATGTAATCTCAGAATAAAGTTGTCATTTAAGTTGAATAAATATATAGCTTTATGAAAAACA
C

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FIGURE 3193

CCCCGCCCCGTTTGCCAGCGCTCAGGCAGGAGCTCTGGACTGGGCGCGCCGCCGCCCTGGAGTGAGGGGAAGCCCAG
TGGAAGGGGGTCCCCGGGAGCCGGCTGCGATGGACGCCGTCTTGGAACCCCTTCCCGGCCGACAGGCTGTTCCCCGG
ATCCAGCTTCCTGGACTTGGGGGATCTGAACGAGTCGGACTTCCTCAACAATGCGCACTTTCTTGAGCACCTGGA
CCACTTTACGGAGAACATGGAGGACTTCTCCAATGACCTGTTTCAGCAGCTTCTTTGATGACCCCTGTGCTGGATGA
GAAGAGCCCTCTATTGGACATGGAAGTGGACTCCCTACGCCAGGCATCCAGGCGGAGCACAGCTACTCCCTGAG
CGGCGACTCAGCGCCCCAGAGCCCCCTTGTGCCATCAAGATGGAGGACACCACCAAGATGCAGAGCATGGAGC
ATGGGCGCTGGGACACAACTGTGCTCCATCATGGTGAAGCAGGAGCAGAGCCCCGGAGCTGCCCGTGGACCCCTCT
GGCTGCCCCCTCGGGCCATGGCTGCCGCGGCCGCCATGGCCACCAGCCCCGCTGCTGGGCCCTCAGCCCCCTTGTC
AGGCTGCCCCATCCCCCACCAGGCCCGGGAGAGATGACTCAGCTGCCAGTGATCAAAGCAGAGCCCTCTGGAGGTG
AACCAGTTCTCAAAGTGACACCGGAGGACCTGGTGCAGATGCCCTCCGACGCCCCCCAGCAGCCATGGCAGTGAC
AGCGACGGCTCCAGAGTCCCCGCTCTCTGCCCCCTCCAGCCCTGTGAGGCCATGGCGCGCTCTCCACGGCC
ATCTCCACCTCCCCACTCCTCACTGCCCCCTCACAATTACAGGGGACATCAGGGCCACTGCTCCTGACAGAGGAG
GAGAAGCGGACCCTGATTGCTGAGGGCTACCCCATCCCCACAAAATCCCCCTCACCAGAGCCGAGGAGAAGGCC
TTGAAGAGAGTCCGGAGGAAAATCAAGAAACAGATCTCAGCCCAGGAGAGCCGTCGTAAGAAGAAGGAGTATGTG
GAGTGTCTAGAAAAGAAGGTGGAGACATTTACATCTGAGAACAATGAACTGTGGAAGAAGGTGGAGACCCTGGAG
AATGCCAACAGGACCCTGCTCCAGCAGCTGCAGAACTCCAGACTCTGGTCACCAACAAGATCTCCAGACCTTAC
AAGATGGCCGCCACCCAGACTGGGACCTGCCTCATGXXX
XX
XXXXXXXXXXXXXXXXTGCCCTCCCGAAGCCTCCTATTCTACGATGACGGGGCAGGCTTATGGGAAGATGGCCGCAGC
ACCCTGCTGCCCATGGAGCCCCCAGATGGCTGGGAAATCAACCCCGGGGGGCCGAGAGCAGCGGCCCGGGAC
CACCTGCAGCATGATCACCTGGACAGCACCCACGAGACCACCAAGTACCTGAGTGAGGCCTGGCCTAAAGACGGT
GGAAACGGCACCCAGCCCCGACTTCTCCCACTCCAAGGAGTGGTTCACGACAGGGATCTGGGCCCAACACCACC
ATCAAATCTCCTAGGCCATGCCAAGACCCAGGACATAGGACGGACCCCTGGTACCCAGAAGAGGAGTTCTTGCT
CACTAACCCGGATCCGCCTCGTGCCCTGCCTCCTGGAGCTTCCCATTCAGGAGAAAAGGCTCCACTTCCCAGC
CCTTCCTTGCCCCCTGACATTTGGACTCTTCCCTTGGGCCGACCACTCTGTTCTCATTCTCCTTCCCACCAACATC
CATCCGTCTTCTCAGACAAACCACTCACTGGGTACCCACCTCCTCTCTCATATGCCCAACACGACCACTGCCT
CCCTGCCCCCACACCTGCACCCAAACAGACACATCAACGCACCCCACTCACAGACACCCCTTACCCACCCCCAC
TGTACAGAGACCAAGAACAGAAATTGTTTGTAATAATGAACCTTATTTTTTATTATTGCCAATCCCCTAAGATA
TTGTATTTTACAAATCTCCCTCTTCCCTTCGCCCTCCCTTGTTTATATTTTATGAAGTTAGTGCGGGCTTTGC
TGCTCCCTGGCCAGGAAAGAGGGACTCCCTGACCCTCACCTGGCACCCCTTGCTGCTGCCAAGCGCTGGGC
CTTTTAAATTGCCAAACTGCTCTCTTCATCAGCTCAGCACATGCTTTAAGAAAGCAAACTAAAAAAAAAAAAAA
AAAGAGGCAGCATC

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FIGURE 3194

TTTTCATTTAAATATTCTTCTTTTGCTTCTCTTAAGCAGAAGCTGGTCTCTGCTTTTCACCACCTGGAATCCCAG
TCCCAACAGCTGCTCTTCTAACCCTTCCGGCCTAATTGTGGAATAATCGTTTAAATCATTAAAGAGACAGAATCTG
ATGTTGGTAGCTCTGACAGACCTCTCTAGCTTCTTTCATAAGCCAGGGCTCTTGCCCAGCTCCTGCACACAGCCT
GCCAGTTCTCCATCTTAGCACAGTTCCACTTTTCCATAGTAGCCAGAAACATCTGGCTGAAGACAAACAGTTACA
AAGCAGAAGCCAAGGTGATGGGATCTGTTGTACATATGGGGCTGGCAGCTCAAGGAATGTGGTTCTCTGCTGAG
GAGATGTGGTAATCCAGTCAGCCCCTGGCTGTCTGCCAAGGGTCTCAAGGCAGCTAGCCAGCAGCTGCATGCTT
GGTGAAGTGGAGCTACTACTACTGCCAGGCTGCCTGGTGAACCTTTTTTGATTCTCAGTAGGTACCATCTGCCACC
AAGCACTAAGAAAGGGAGCTGAAGTACCTAGAAAGTTCCCATTTGGGAAGTGTTCCTGTCAACCAAGAGACAGGA
TCAAGGCATCTCAACAAGGTTTAGGTCAACCAAGTGTCCACCCAGTCTGACTTTAAACCCCCATGCTACAGAAAG
GTTTCTGGTTTTCCAGGTCTTGGTTGCCCTTACGTCCAAAGGCACCAGATCACTCAGCAAATGTCCCTGAATTC
AGTGATTGGTGAAGGGAAGACACCAGCTTTTTTGGATAGCTGTGCTGTATCACCGTTTAAAGGCAAGAAGTGAAT
TTTTGTCTGAGAACAGGGAGCAAGGGTTTAAATGGGACAGTACAGCATCTCCCTCTTTGCACAGGTAAGTATAGGT
GGGTGTCTCCATCTCTAATGTCAAGCTCTGACCATAAAGGAATGCTTTAGTGGGTAATGGGCCTGTCTTAGAGCT
TTGCTACCCAGAATTTCCCTTCTGTCTGGTGTACCTCTTGAATTCAGTGTGGTAATGTTTCAGAGAGGCAAATG
TGTTGGGCCAACAGACATTCCAGGAGAACATCCTCCAGAGCATTGATTTATTTTAAGATGGCACTAAGTGACAT
CTCTCCCCAAGAGATGATCTCTGACACAATCCCATATGAAAACCTCTTCTGAAAATGAATTGCTAATTGCTATTAG
CCTTGATGCACTTACTCTAAGCAGTTCTTCAGACTTCTGGATCAGTGCTTCTCAAACCTGTGGTTCTTGGACAAC
TACAGTAGAACTACATGGGTCTTATTTAAATACAGATCCATTTTCAGACCTAAAATCAGAATAAGAATGGGAGTC
AGAGGGACCCAGGATTAGTATTTTTTAAACAAGATTTCTTTCATTTTAGGTGTCTGCCCTCAGCCTCCTCAGCAAG
GCAGAGTCAGTCTCAGGTCTACTTGCCATTGTGGTTTTTGTGCATGGTGTCTTGATTCTTTGCTAATTATGTTGCA
GGCACAGTGGTGTCTTGTCTTCTGTTTCTACCAAACCTCAGCTTTTTTGGCTGTCTGCGCCTCACCTCCCATCTTT
TCTAGGCTGTGCTGCTTTCCAGGTTTCTCCCTTGAATAGCTGTATGTGCTGGAGTCTTTTCTTTATGTTGAATC
ATTTTAATTTTTGTCTTATTTCTAGGATCTAGGGTCTTTTGATCTTTCCCTTCTCTGTTTATCGTGCTAGTCC
TCCAGTTTTTAATGATGGGTAAGTCAGGAAAGTAAGACTGGGCACATATTTTCTCTCTCCCTTCCACTGTCCAT
TTGCGATTCCCTCCAGATTGGATATGCTACTCTCTATGACTCAGAATCTTATTTTCTGTCTGATTCCCTTCTGCTT
GAGCCAGAGAGGGCTTTTTGTAAATTTTTGTGTTTTGTTTTAGGTAAAGCTTTTAGAGACTGCTGAGCTGAAGTTT
TGCTGAATTTCTCAAAACACTAAACTGCCTGTGTTCCCTCTCGGCTTTTCAATTTCTAATTGGAACCAGGCACAGTA
TTGTAACAGAGAAGTGAATTAATTTTCTAAATAGTGGCAACTTGCACAGTATAATAACTTTGGTTGTAACCAA
GTGAAAGCATAATAACAAAATACAAAATTACTGATGAAACCAGAAAGAGTCATATACCACATTCTTCCTTTAGT
TTGTATCTCAGTAAGTGTGTTACTTAGGAATAGGGGCAGAAAGCCTGCAACTGGGCAGGGAGGTTTCAGGGACA
TGAGGACGAAGCTAGGGCATTTTGAGCTAGAAAGCAAGAATAAGGATTAGTGCTTTCAACACTGGAATTAACATG
GACCACCCCCCACCCTCCCAATAAGTGGGGATTGTAGGCACATAAGTGGTTTAGTAAGAAGTGGAAAAGGTTTTT
CTGTGGAGTTTCAGTTCCATCGGCTCCCATCCGGGCTATCCTGCCACCTTAGCGGCTGCTCCTCCCAGGATGCG
GGCAGGGGGCCTCTCTCCACTCCCCACACACCGATTTCTGAGTAGCGATAGGGGCTGGAGGCTTATTTTATGGG
GTAGGGGGCCGCTGGTAGGCGAAGATTGTCCGAGGGAGAGGGGAGGATGAAGCCAGTGCGTGGCGGAGACCTGC
CAGATGTTGATGCCTAAGAAGAACCAGATTGCCATTTATGAACCTCTTTTAAAGAGGGAGTCATGGTGGCCAAG
AAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAAGAATGTGCCAACCTTCATGTCTATGAAGGCCATG
CAGTCTCTCAAGTCCCGAGGCTACGTGAAGGAACAGTTTGCTTGAGACATTTCTACTGGTACCTTACCAATGAG
GGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCAGAGATTGTGCTGCCATCCTACGCCGTAGCCGTCCA
GAGACTGGCAGGCCTCGGCCTAAAGGTCTGGAGGGTGAGCGACCTGCGAGACTCACAAGAGGGGAAGCTGACAGA
GATACCTACAGACGGAGTGTGTGCCACCTGGTGCCGACAAGAAAGCCGAGGCTGGGGCTGGGTGAGCAACCGAA
TTCCAGTTTAGAGGCGGATTTGGTGTGACGTGGTCAGCCACCTCAGTAAATTTGGAGAGGATTCTTTTGCATT
GAATAAATTTATAGCCAAAAACCTT

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FIGURE 3195

AGATGTTGATGCCTAAGAAGAACCGGATTGCCATTTATGAACTCCTTTTTTAAGGAGGGAGTCATGGTGGCCAAGA
AGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAAGAATGTGCCCAACCTTCATGTCATGAAGGCCATGC
AGTCTCTCAAGTCCCAGGGCTACGTGAAGGAACAGTTTGCCTGGAGACATTTCTACTGGTACCTTACCAATGAGG
GTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCCAGAGATTGTGCCTGCCATCCTACGCCGTAGCCGTCCAG
AGACTGGCAGGCCTCGGCCTAAAGGTCTGGAGGGTGAGCGACCTGCGAGACTCACAAGAGGGGAAGCTGACAGAG
ATACCTACAGACGGAGTGCTGTGCCACCTGGTGCCGACAAGAAAGCCGAGGCTGGGGCTGGGTCAGCAACCGAAT
TCCAGTTTAGAGGCGGATTTGGTCGTGGACGTGGTCAGCCACCTCAGTAAAATTGGAGAGGATTCTTTTGCATTG
AATAAACTTATAGCCAAAAACCTTAAAAAA

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FIGURE 3196

GCGAAGCAGCGCGGGCAGCGAGATGCAGCACCGAGGCTTCCTCCTCCTCACCCCTCCTCGCCCTGCTGGCGCTCAC
CTCCGCGGTTCGCCAAAAAGAAAGATAAGGTGAAGAAGGGCGGCCCGGGGAGCGAGTGCCTGAGTGGGCCTGGGG
GCCCTGCACCCCCAGCAGCAAGGATTGCGGCGTGGGTTTCCGCGAGGGCACCTGCGGGGGCCAGACCCAGCGCAT
CCGGTGCAGGGTGCCCTGCAACTGGAAGAAGGAGTTTGGAGCCGACTGCAAGTACAAGTTTAAAAAATGGGGTGA
AGTGTGATGGGGGCACAGGCACCAAAGTCCGCCAAGGCACCCTGAAGAAGGCGCGCTACAATGCTCAGTGCCAGG
AGACCATCCGGGTCCCCCAGCCCTGCACCCCCAAGACCAAAGCAAAGGCCAAAGCCAAGAAAGGGAAGGGAAAGG
ACTAGACGCCAAGCCTGGATGCCAAGGAGCCCTGGTGTACATGGGGCCTGGCCCACGCCCTCCCTCTCCCAGG
CCCGAGATGTGACCCACCAGTGCCCTTCTGTCTGCTCGTTAGCTTTAATCAATCATGCCCTGCCTTGTCCCTCTCA
CTCCCCAGCCCCACCCCTAAGTGCCCAAAGTGGGGAGGGACAAGGGATTCTGGGAAGCTTGAGCCTCCCCCAAAG
CAATGTGAGTCCCAGAGCCCGCTTTTGTCTTCCCCACAATTCCATTACTAAGAAACACATCAAATAAACTGACT
TTTCCCCCAATAAAAAGCTCTTCTTTTAAATAT

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FIGURE 3197

GCGGCGCGGAGCGGGCGTGTGAGCCCCGGCCGCCGGCCCGCATGGGCGTCTCCCCGCGGGCCCTCCGCCGGCCG
GGGCTAGGGCCCGGATCGAGCCGCGGGACGGTAGCCCCGAGGCCGGAGCAGCGACTCCGAGTCGGCTTCCGCCCTC
GTCCAGCGGCTCCGAGCGCGACGCCGGTCCCGAGCCGGACAAGGCCCGCGCGGACTCAACAAGCGGGCGCTTCCC
GGGGCTGCGGCTCTTCGGGCACAGGAAAGCCATCACCAAGTCGGGCTCCAGCACCTGGCCCCCCTCCGCCAC
CCCTGGGGCCCCGTGCAGCGAGTCAGAGCGGCAGATCCGGAGTACAGTGGACTGGAGCGAGTCAGCGACATATGG
GGAGCACATCTGGTTCGAGACCAACGTGTCCGGGGACTTCTGTACGTGGGGAGCAGTACTGTGTAGCCAGGAT
GCTGAAGTCAGTGTCTCGAAGAAAGTGCAGCAGCCTGCAAGATTGTGGTGCACACGCCCTGCATCGAGCAGCTGGA
GAAGATAAATTTCCGCTGTAAGCCGTCTTCCGTGAATCAGGCTCCAGGAATGTCCGCGAGCCAACCTTTGTACG
GCACCACTGGGTACACAGACGACGCCAGGACGGCAAGTGTCCGGCACTGTGGGAAGGGATTCCAGCAGAAGTTTAC
CTTCCACAGCAAGGAGATTGTGGCCATCAGCTGCTCGTGGTGCAGCAGGCATACACAGCAAGGTGTCTGTCTT
CATGCTGCAGCAGATCGAGGAGCCGTGCTCGCTGGGGGTCCACGCAGCCGTGGTCATCCCGCCACCTGGATCCT
CCGCGCCCCGGAGGCCCCAGAATACTCTGAAAGCAAGCAAGAAGAAGAGGGCATCCTTCAAGAGGAAGTCCAG
CAAGAAAGGGCCTGAGGAGGGCCGCTGGAGACCCTTCATCATCAGGCCACCCCTCCCCGCTCATGAAGCCCT
GCTGGTGTITGTGAACCCCAAGAGTGGGGGCAACCAGGGTGCAAGATCATCCAGTCTTTCTCTGGTATCTCAA
TCCCCGACAAGTCTTCGACCTGAGCCAGGGAGGGCCCAAGGAGGCGCTGGAGATGTACCGCAAAGTGCACAACCT
GCGGATCCTGGCGTGCAGGGGCGACGGCACGGTGGGCTGGATCCTCTCCACCTGGACCAGCTACGCCTGAAGCC
GCCACCCCTGTGGCATCCTGCCCTGGGTACTGGCAACGACTTGGCCCGAACCTCAACTGGGGTGGGGGCTA
CACAGATGAGCCTGTGTCCAAGATCCTCTCCACGTGGAGGAGGGGAACGTGGTACAGCTGGACCCTGGGACCT
CCACGCTGAGCCCAACCCGAGGCAGGGCCTGAGGACCGAGATGAAGGCCCAACCGACCGGTTGCCCTGGATGT
CTTCAACAATACTTACGCTGGGCTTTGACGCCACGTACCCCTGGAGTTCCACGAGTCTCGAGAGGCCAACC
AGAGAAATTCAACAGCCGCTTTCCGAATAAGATGTTCTACGCCGGGACAGCTTTCTCTGACTTCTGATGGGCAG
CTCCAAGGACCTGGCCAAGCACATCCGAGTGGTGTGTGATGGAATGGACTTGACTCCCAAGATCCAGGACCTGAA
ACCCAGTGTGTGTTTTCTGAACATCCCCAGGTACTGTGCGGGCACCATGCCCTGGGGCCACCTGGGGAGCA
CCACGACTTTGAGCCCCAGCGGCATGACGACGGCTACCTCGAGGTCATTGGCTTACCATGACGTCGTTGGCCGC
GCTGCAGGTGGGCGGACACGGCGAGCGGTGACGCAGTGTGCGGAGGTGGTGTCTACCACATCCAAGGCCATCCC
GGTGCAGGTGGATGGCGAGCCCTGCAAGCTTGACGCTCACGCATCCGCATCGCCCTGCGCAACCAAGGCCACCAT
GGTGCAGAAGGCCAAGCGGCGGAGCGCCGCCCTTGACAGCGACCAGCAGCCGGTGCCAGAGCAGTTGCGCAT
CCAGGTGAGTCGCGTCAGCATGCACGACTATGAGGCCCTGCACTACGACAAGGAGCAGCTCAAGGAGGCCTCTGT
GCCGCTGGGCACTGTGGTGGTCCCAGGAGACAGTGACCTAGAGCTTGCCGTGCCACATTGAGAGACTCCAGCA
GGAGCCCGATGGTGTGGAGCCAAGTCCCCGACATGCCAGAACTGTCCCCAAGTGGTGTCTTCTGGAGGCCAC
CACTGCCAGCCGCTTCTACAGGATCGACCGAGCCAGGAGCACCTCAACTATGTGACTGAGATCGCACAGGATGA
GATTTATATCTTGACCCCTGAGCTGCTGGGGGCATCGGCCCGGCTGACCTCCCAACCCCACTTCCCTCTCCC
CACCTCACCTGCTCACCCACGCCCGGTCACTGCAAGGGGATGCTGCACCCCTCAAGGTGAAGAGCTGATTGA
GGCTGCCAAGAGGAACGACTTCTGTAAGCTCCAGGAGCTGCACCGAGCTGGGGGCGACCTCATGCACCGAGACGA
GCAGAGTCGCACGCTCCTGCACACGCAGTCAGCACTGGCAGCAAGGATGTGGTCCGCTACCTGCTGGACCACGC
CCCCCAGAGATCCTTGATGCGGTGGAGGAAAACGGGGAGACCTGTTTGACCAAGCAGCGGCCCTGGGCCAGCG
CACCATCTGCCACTACATCGTGGAGGCCGGGGCTCGCTCATGAAGACAGACCAGCAGGGCGACACTCCCCGGCA
GCGGGCTGAGAAGGCTCAGGACACCGAGCTGGCCGCCTACCTGGAGAACCAGGCAGCACTACCAGATGATCCAGCG
GGAGGACCAGGAGACGGCTGTGTAGCGGGCCGCCACGGGCAGCAGGAGGGACAATGCGGCCAGGGGACGAGCGC
CTTCTTGGCCACCTCACTGCCACATTCCAGTGGGACGGCCACGGGGGACCTAGGCCCCAGGGAAAGAGCCCCA
TGCCGCCCTAAGGAGCCGCCAGACCTAGGGCTGGACTCAGGAGCTGGGGGGGCTCACCTGTTCCCCTGAGG
ACCCCGCCGACCCGGAGGCTCACAGGGAACAAGACAGGCTGGGTTGGATATGCCTTTGCCGGGGTCTGGGGC
AGGGCGCTCCCTGGCCGCAGCAGATGCCCTCCCAGGAGTGGAGGGGCTGGAGAGGGGGAGGCCTTCGGGAAGAGG
CTTCTGGGGCCCCCTGGTCTTGGCCGGGTCCCCAGCCCCGCTCCTGCCCCACCCACCTCCTCCGGGCTTCT
CCCGGAAACTCAGCGCCTGCTGCACTTGCTGCCCTGCCCTGCTTGGCACCCGCTCCGGCGACCTCCCCGCTCC
CCTGTCAATTCATCGCGGACTGTGCGGCTGGGGGTGGGGGGCGGACTCTCACGGTGACATGTTTACAGCTGGG
TGTGACTCAGTAAAGTGGATTTTTTTTTCTTTAAAAAAA

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FIGURE 3198

MEPRDGSPEARSSDSESASASSSGSERDAGPEPDKAPRRLNKRFPGLRFLGHRKAITKSGLQHLAPPPPTPGAP
CSESERQIRSTVDWSESATYGEHIWFETNVSGDFCYVGEQYCVARMLKSVSRKCAACKIVVHTPCIEQLEKINF
RCKPSFRESGSRNVREPTFVRHHVHRRRQDGKCRHCGKGFQQKFTFHSKEIVAI SC SWCKQAYHSKVSCFMLQQ
IEEPCSLGVHAAVVIPPTWILRARRPQNTLKASKKKRASFKRKSSKKGPEEGRWRPFIIRPTPSPLMKPLLVFV
NPKSGGNQGAIIQSFLWYLNPRQVFDLSQGGPKEALEMYRKVHNLRI LACGGDGTVGWILSTLDQLRLKPPPPV
AILPLGTGNDLARTLNWGGGYTDEPVSKILSHVEEGNVVQLDRWDLHAEPNPEAGPEDRDEGATDRLPLDVFNNY
FSLGFDHVTLEFHESREANPEKFNSRFRNKM FYAGTAFSDFLMGSSKDLAKHIRVVC DGM DLT PKIQDLKPQCV
VFLNIPRYCAGTMPWGHFGEHDFEPQRHDDGYLEVIGFTMTSLAALQVGGHGERLTQCREVVLTTSKAIPVQVD
GEPCKLAASRIRIALRNQATMVQKAKRRSAAPLHSDQQPVPEQLRIQVSRVSMHDYEALHYDKEQLKEASVPLGT
VVVPGDSDLELCRAHIERLQQEPDGAGAKSPTCQKLSPKWCFLDATTASRFYRIDRAQEHNLNYVTEIAQDEIYIL
DPELLGASARPDLPPTSP LPTSPCSP TPRS LQGD AAPQGEELIEAAKRND FCKLQELHRAGGDL MHRDEQSRT
LLHHAVSTGSKDVVRYLLDHAPPEILD AVEENGETCLHQAAALGQRTICHYIVEAGASLMKTDQQGDTFPRQRAEK
AQDTELAAYLENRQHYQMIQREDQETAV

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FIGURE 3199

CATCTGAGTAACATGGCGGCGGCGGCGGTAGCCAGGCTGTGGTGGCGCGGGATCTTGGGGGGCCTCGGGCGCTGACC
AGGGGGACTGGGCGACCCCTCCGTTCTGTTGCTGCCGGTGAGGCGGGAGAGCGCCGGGGCCGACACGCGCCCCACT
GTCAGACCACGGAATGATGTGGCCACAAGCAGCTCTCAGCTTTTGGAGAGTATGTGGCTGAAATCTTGCCCAAG
TATGTCCAACAAGTTCAGGTGTCCTGCTTCAATGAGTTAGAGGTCTGTATCCATCCTGATGGCGTCATCCCAAGT
CTGACTTTCTCAGGGATCACACCAATGCACAGTTCAAATCTCTGGTTGACTTGACAGCAGTGGACGTCCCAACT
CGGCAAAACCGTTTGGAGATTGTCTACAACCTGTTGTCTCTGCGCTTCAACTCACGGATCCGTGTGAAGACCTAC
ACAGATGAGCTGACGCCCATTGAGTCTGCTGTCTCTGTGTTCAAGGCAGCCAACTGGTATGAAAGGGAGATCTGG
GACATGTTTGGAGTCTTCTTTGCTAACCACCCTGATCTAAGAAGGATCCTGACAGATTATGGCTTCGAGGGACAT
CCTTTCCGAAAGACTTTCTCTATCTGGCTATGTTGAGTTACGTTATGATGATGAAGTGAAGCGGGTGGTGGCA
GAGCCGGTGGAGTTGGCCCAAGAGTTCCGCAAATTTGACCTGAACAGCCCCCTGGGAGGCTTTCCCAAGTCTATCGC
CAACCCCGGAGAGTCTCAAGCTTGAAGCCGGAGACAAGAAGCCTGATGCCAAGTAGCTCCAGGGAACGCATGTG
GATCCTAGACAGCGCCTTATCTATGATTGAGTGTCCGTGTAAATAAATTCCTACTTAGACTTAAAAAAAAAAAAA

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FIGURE 3200

MAAAVARLWWRGILGASALTRGTGRPSVLLLPVRRESAGADTRPTVRPRNDVAHKQLSAFGEYVAEILPKYVQQ
VQVSCFNELEVCIHPDGVIPVLTFLRDHTNAQFKSLVDLTAVDVPTRQNRFEIVYNLLSLRFNSRIRVKTYTDEL
TPIESAVSVFKAANWYEREIWDMGVFFANHPDLRRILTDYGFEGHPFRKDFPLSGYVELRYDDEVKRVVAEPVE
LAQEFRKFDLNSPWEAFPVYRQPPESLKLEAGDKKPKDAK

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FIGURE 3201

GATTTCGCTGCTCCGCAGCACGGCCGGAGCTGGTTCGGGTCAAGAGTCGGGATTGTGGGGAGAGGTTTTCCACTGG
TCAAGAGAAGGCTTTAAGAAAGACGGTATTAATCTCCCGTTGCGGCTCCCGCCTGGTCCCATCTTCTGCCCCGCTC
CTCCAGGAAATGAATCTGCTGCCGAATATTGAGAGTCCAGTGACTCGGCAGGAGAAGATGGCGACCGTGTGGGAT
GAGGCCGAGCAAGATGGAATTGGGGAGGAGGTGCTCAAGATGTCCACGGAGGAGATCATCCAGCGCACACGGCTG
CTGGACAGTGAGATCAAGATCATGAAGAGTGAAGTGTTGAGAGTCACCCATGAGCTCCAAGCCATGAAGGACAAG
ATAAAAGAGAACAGTGAGAAAATCAAAGTGAACAAGACCCTGCCGTACCTTGTCTCCAACGTCATCGAGCTCCTG
GATGTTGATCCTAATGACCAAGAGGAGGATGGTGCCAATATTGACCTGGACTCCCAGAGGAAGGGCAAGTGTGCT
GTGATCAAAACCTCTACACGACAGACGTACTTCTTCTTCTGTGATTGGGTTGGTGGATGCTGAAAAAGCTAAAGCCA
GGAGACCTGGTGGGTGTGAACAAAGACTCCTATCTGATCCTGGAGACGCTGCCACAGAGTATGACTCGCGGGTG
AAGGCCATGGAGGTAGACGAGAGGGCCACGGAGCAATACAGTGACATTGGGGGTTTGGACAAGCAGATCCAGGAG
CTGGTGGAGGCCATTGTCTTGCCAATGAACCACAAGGAGAAGTTTGAGAACTTGGGGATCCAACCTCCAAAAGGG
GTGCTGATGTATGGGCCCCCAGGGACGGGGAAGACCCTCCTGGCCCCGGGCTGTGCCGCACAGACTAAGGCCACC
TTCCTAAAGCTGGCTGGCCCCCAGCTGGTGCAGATGTTTATTGGAGATGGTGCCAAGCTAGTCCGGGATGCCTTT
GCCCTGGCCAAGGAGAAAGCGCCCTCTATCATCTTCAATGATGAGTTGGATGCCATCGGCACCAAGCGCTTTGAC
AGTGAGAAGGCTGGGGACCGGGAGGTGCAGAGGACAATGCTGGAGCTTCTGAACCAGCTGGATGGCTTCCAGCCC
AACACCCAAGTTAAGGTAATTGCAGCCACAAACAGGGTGGACATCCTGGACCCCGCCCTCCTCCGCTCGGGCCGC
CTTGACCGCAAGATAGAGTTCCCGATGCCCAATGAGGAGGCCCGGGCCAGAATCATGCAGATCCACTCCCGAAAG
ATGAATGTCAGTCCTGACGTGAACTACGAGGAGCTGGCCCGCTGCACAGATGACTTCAATGGGGCCCAGTGCAAG
GCTGTGTGTGTGGAGGCGGGCATGATCGCACTGCGCAGGGGTGCCACGGAGCTACCCACGAGGACTACATGGAA
GGCATCCTGGAGGTGCAGGCCAAGAAGAAAGCCAACCTACAATACTACGCCTAGGGCACACAGGCCAGCCCCAGT
CTCACGGCTGAAGTGCGCAATAAAAGATGGTTTAGGGTCCCTGCC

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FIGURE 3202

GGGGCCGCCCGGATCGCCGCCGCCGCCGCCGCACGTACGTGGCATGCCTGGATGTCCCTGCCCTGGCTGTGGCAT
GGCGGGCCCAAGGCTCCTCTTCTCCTCACTGCCCTTGCCCTGGAGCTCTTGGAAAGGGCTGGGGGTTCCAGCCGGC
CCTCCGGAGCCGGGGGACTGCGACGGCCTGTGCGCTGGACAACAAGGAAAGCGAGTCCTGGGGGGCTCTGCTGAG
CGGAGAGCGGCTGGACACCTGGATCTGCTCCCTCCTGGGTTCCCTCATGGTGGGGCTCAGTGGGGTCTTCCCGTT
GCTTGTCAATCCCTAGAGATGGGGACCATGCTGCGCTCAGAAGCTGGGGCCTGGCGCCTGAAGCAGCTGCTCAG
CTTCGCCCTGGGGGGACTCTTGGGCAATGTGTTTCTGCATCTGCTGCCCGAAGCCTGGGGCTACACGTGCAGCGC
CAGCCCTGGTGGTGAGGGGCAGAGCCTGCAGCAGCAGCAACAGCTGGGGCTGTGGGTCAATTGCTGGCATCCTGAC
CTTCCTGGCGTTGGAGAAGATGTTCTGGACAGCAAGGAGGAGGGGACCAGCCAGGCCCCCAACAAAGACCCCCAC
TGCTGCTGCCGCCGCGCTCAATGGAGGCCACTGTCTGGCCAGCCGGCTGCAGAGCCCGGCTCGGTGCCGTGGT
CCGGAGCATCAAAGTCAGCGGCTACCTCAACCTGCTGGCCAACACCATCGATAACTTACCCACGGGCTGGCTGT
GGCTGCCAGCTTCCTTGTGAGCAAGAAGATCGGGCTCCTGACAACCATGGCCATCCTCCTGCATGAGATCCCCA
TGAGGTGGGCGACTTTGCCATCCTGCTCCGGGCGGGCTTTGACCGATGGAGCGCAGCCAAGCTGCAACTCTCAAC
AGCGCTGGGGGGCCTACTGGGCGCTGGCTTCGCCATCTGTACCCAGTCCCCCAAGGGAGTAGTTGGGTGTTCTCC
CGCTGCAGAGGAGACGGCAGCCTGGGTCTGCCCTTACCTCTGGCGGCTTCTCTACATCGCCTTGGTGAACGT
GCTCCCTGACCTCTTGAAGAAGAGGACCCGTGGCGCTCCCTGCAGCAGCTGCTTCTGCTCTGTGCGGGCATCGT
GGTAATGGTGCTGTTCTCGCTCTTCGTGGATTAACTTTCCCTGATGCCGACGCCCTGCCCTGCAGCAATAAG
ATGCTCGGATTCACTCTGTGACCGCATATGTGAGAGGCAGAGAGGGCGAGTGGCTGCGAGAGAGAATGAGCCTCC
CGCCAGACAGGAGGGAGGTGCGTGTGGATGTATGTGGTGTGCACATGTGGCCAGAGGTGTGTGCGCGAGACCGAC
ACTGTGATCCCTGTGCTGGGTCCGGGGCCAGTGTAGCGCTGTCCCCAGCCATGCTGTGGTTACCTCTCCTTGC
CGCCCTGTACCTTACCTCCCGGAGTAAGCAGCGAGGAAGAGCAGCACTGGTCCCAAGCAGAGGCCTTGCCCTG
CTGGGACCCCGGGAGTGAGAGCAGCCCAAGGATCCAGGGTGCAGGGAACCTCCAGAGCTGCCCACCTCCCCTGCC
CCCTCAGCACACACAGTCCCCAGGCGGCCTAGGGGCCAAGGCTGGGGCGGCTTTGGTCCCTTTTCTGGCCCT
TCCTTCCCCACTTCTAAGCCAAAGAAAGGAGAGGCAGGTGCTCCTGTACCCAGCCCCACTCAGCACTGACAGTC
CCCAGCTCCTAGTAGTGAGCTGGGAGGCGCTTCCTAAGACCCTTTCCTCAGGGCTGCCCTGGGAGCTCATTCTTG
GCCAACACGCCCTGGCAGCACACAGCAGCTCTTGCCACCTCCAGCTGCCAAACAGCAGCCTGCCGGGCAGGGAGCA
GCCCCAGGCCAGAGAGGCCTCCCGTCCAGCTCAGGGATGCTCCTGCCAGCACAGGGGCCAGGGACTCCTGGAGC
AGGCACATAGTGAGCCCGGGCAGCCCTGCCAGCTCAGGCCCTTTCCTTCCCCATTGAGGTTGGGGTAGGTGGG
GGCGGTGAGGGCTCCACGTTGTGAGCGCTCAGGAATGTGCTCCGGCAGAGTGCTGAAGCCATAATCCCCAACCAT
TTCCCTTGGCTGACGCCCAGGTACTCAGCTGGCCCACTCCACAGCCAGGCCTGGCCCTGCCCTTACCGTGGATG
TTTTCAGAAGTGGCCATCGAGAGGTCTGGATGGTTTATAGCAACTTTGCTGTGATTCCGTTTGTATCTGTAAAT
ATTTGTTCTATAGATAAGATACAAATAAATATTATCCACAT

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FIGURE 3203

MPGCPGCGMAGPRLFLTLALELLERAGGSQPALRSRGTTACRLDNKESESWGALLSGERLDTWICSLGSLGS
LMVGLSGVFPLLVIPLEMGTMRLRSEAGAWRLKQLLSFALGGLGNVFLHLLPEAWAYTCSASPGGEGQSLQQQQQ
LGLWVIAGILTFLALEKMF LDSKEEGTSQAPNKDPTAAAAALNGGHCLAQPAAEPGLGAVVRSIKVSGYLNLLAN
TIDNFTHGLAVAASFLVSKKIGLLTTMAILLHEIPHEVGDFAILLRAGFDRWSAAKLQLSTALGGLLGAGFAICT
QSPKGVVGCSPAAEETAAWVLPFTSGGFLYIALVNVLPDLLEEEDPWRSLQQLLLLCAGIVVMVLFSLFVD

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FIGURE 3204

CAGTGCCTTGGTAATGACCAGGGCTCCAGAAAGAGATGTCCTTGTGGCTGGGGGCCCTGTGCCTGACATTCCCTC
CTGACTCTGCGGTGGAGCTGTGGAAGCCAGGCGCACAGGATGCAAGCAGCCAGGCCCAGGGAGGCAGCAGCTGCA
TCCTCAGAGAGGAAGCCAGGATGCCCCACTCTGCTGGGGGTACTGCAGGGGTGGGGCTGGAGGCTGCAGAGCCCA
CAGCCCTGCTCACCAGGGCAGAGCCCCCTTCAGAACCCACAGAGATCCGTCCACAAAAGCGGAAAAAGGGGCCAG
CCCCAAAATGCTGGGGAACGAGCTATGCAGCGTGTGTGGGGACAAGGCCTCGGGCTTCCACTACAATGTTCTGA
GCTGCGAGGGCTGCAAGGGATTCTTCCGCCGCAGCGTCATCAAGGGAGCGCACTACATCTGCCACAGTGGCGGCC
ACTGCCCCATGGACACCTACATGCGTCGCAAGTGCCAGGAGTGTGCGCTTCGCAAATGCCGTCAGGCTGGCATGC
GGGAGGAGTGTGCTCTGTGAGAAGACAGATCCGCCTGAAGAACTGAAGCGGCAAGAGGAGGAACAGGCTCATG
CCACATCCTTGCCCCCAGGCGTTCTCACCCCCCAAATCCTGCCCCAGCTCAGCCCCGAACAACCTGGGCATGA
TCGAGAAGCTCGTCGCTGCCAGCAACAGTGTAACCGGCGCTCCTTTTCTGACCGGCTTCGAGTCACGCCTTGGC
CCATGGCACCAGATCCCCATAGCCGGGAGGCCCCGTCAGCAGCGCTTTGCCACTTCACTGAGCTGGCCATCGTCT
CTGTGCAGGAGATAGTTGACTTTGCTAAACAGCTACCCGGCTTCCTGCAGCTCAGCCGGGAGGACCAGATTGCCC
TGCTGAAGACCTCTGCGATCGAGGTGATGCTTCTGGAGACATCTCGGAGGTACAACCTGGGAGTGAGAGTATCA
CCTTCTCAAGGATTTTCAGTTATAACCGGGAAGACTTTGCCAAAGCAGGGCTGCAAGTGGAATTCATCAACCCCA
TCTTCGAGTTCTCCAGGGCCATGAATGAGCTGCAACTCAATGATGCCGAGTTTGCCTTGCTCATTGCTATCAGCA
TCTTCTCTGCAGACCGGCCAACGTGCAGGACCAGCTCCAGGTGGAGAGGCTGCAGCACACATATGTGGAAGCCC
TGCATGCCTACGTCTCCATCCACCATCCCCATGACCGACTGATGTTCCACGGATGCTAATGAACTGGTGAGCC
TCCGGACCCTGAGCAGCGTCCACTCAGAGCAAGTGTTTGCAGTGCCTCTGCAGGACAAAAGCTCCCACCGCTGC
TCTCTGAGATCTGGGATGTGCACGAATGACTGTTCTGTCCCCATATTTTCTGTTTTCTTGGCCGGATGGCTGAGG
CCTGGTGGCTGCCTCCTAGAAGTGGAACAGACTGAGAAGGGCAAACATTCTGGGAGCTGGGCAAGGAGATCCTC
CCGTGGCATTAAAAGAGAGTCAAAGGGT

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FIGURE 3205

MSLWLGAPVPDIPPDSAVELWKPGAQDASSQAQGGSSCILREEARMPHSAGGTAGVGLEAAEPTALLTRAEPPE
PTEIRPQKRKKGPAPKMLGNELCVCGDKASGFHYNVLSCEGCKGFFRRSVIKGAHYICHSGGHCPCMDTYMRRKC
QECRLRKCRQAGMREECVLSEEQIRLKKLKRQEEQAHATSLPPRRSSPPQILPQLSPEQLGMIEKLVAQQQCN
RRSFSDRLRVTPWPMAPDPSREARQQRFAHFTELAIVSVQEIVDFAKQLPGFLQLSREDQIALKTSIEVMLL
ETSRRYNPGSESITFLKDFSYNREDFAKAGLQVEFINPIFEFSRAMNELQLNDAEFALLIAISIFSADRPNVQDQ
LQVERLQHTYVEALHAYVSIHHPHDLRMFPRMLMKLVSLRTLSSVHSEQVFALRLQDKKLPLLSEIWDVHE

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FIGURE 3206

TTGCTGCATAGATTACAACGGTGATGGCGGGCAAGCGGTCCGGCTGGAGCCGGGCGGCTCTCCTCCAGCTCCTTC
TCGGCGTGAACCTGGTGGTGATGCCGCCACCCGGGCGCGGAGTCTGCGCTTCGTTACCTTGCTGTACCGCCATG
GAGACCGTTACCAAGTGAAGACATATCCCAAGGACCCCTATCAGGAAGAAGAAATGGCCCCAGGGGTTTGGTCAGT
TAACCAAGGAGGGGATGCTACAGCACTGGGAACTGGGCCAGGCCCTGCGGCAGCGCTATCACGGCTTCTCTAAACA
CCTCTTATCACCGGCAAGAGGTTTATGTGCGAAGCACAGACTTTGACCGGACTCTCATGAGTGCTGAGGCCAAC
TGGCTGGACTCTTCCCTCCCAACGGGATGCAGCGCTTCAACCCGAACATCTCGTGGCAGCCTATTCTGTGCACA
CTGTGCCCATCACTGAGGACAGGCTGCTGAAGTTCCCGTTGGGCCCATGTCCCGTTATGAGCAGCTGCAGAACG
AGACCCGGCAGACACCAGAGTATCAGAATGAGAGTTCTCGGAATGCACAATTTCTGGACATGGTGGCCAACGAGA
CAGGGCTTACAGACCTGACACTGGAGACCGTCTGGAATGTCTATGACACACTCTTCTGTGAGCAAACGCACGGGC
TGCGCCTGCCGCCCTGGGCCCTACCCCAAAACCATGCAGCGTCTCAGCCGGCTAAAGGACTTCAGCTTCCGCTTCC
TCTTCGGAATCTACCAGCAGGCGGAGAAGGCCCGGCTTCAGGGGGGAGTCTGCTGGCTCAGATAAGGAAGAACC
TGACCCTAATGGCGACCACCTCCCAGCTCCCCAAGCTGCTGGTTTTACTCTGCGCACGACACTACCCTGGTTGCC
TGCAAATGGCACTGGATGTCTACAATGGTGAACAAGCCCCCTACGCCCTCTGCCACATATTGAACTGTACCAGG
AAGATTCTGGGAATTTCTCAGTGGAGATGTACTTTCGGAACGAGAGTGACAAGGCCCCCTGGCCGCTCAGCCTGC
CTGGCTGCCCTCACCGCTGCCCACTGCAGGACTTCTTCGCCTCACAGAGCCCGTCTGTGCCCAAGGATTGGCAGC
AGGAGTGCCAGCTGGCAAGCGGTCCTGCAGACACAGAGGTGATTGTGGCCTTGGCTGTATGTGGCTCCATCCTCT
TCCTCCTCATAGTGCTGCTCCTCACCGTCTCTTCCGGATGCAGGCCCAGCCTCCTGGCTACCGCCACGTGCGAG
ATGGGGAGGACCACGCCTGACACAACCACTCAGCCCCCTTCCCTCCACCTCCTAGGGGAGGTGGGCTGGGCCCTCGC
TCCTGACTGTTGCTGCTCCCCAGCCCATGGACAGGAGATCCTGGGTTGGGCCTCCCTCTGATGACCCACGCCAGA
TGAGCGAGTGGGGCTCAGCGTGGCCCATGGTGCCTGTCACTCAGCATTCCCATGCCTGATGTTTACCAAGTGCTG
TGTTGGACACTGGCTTTCTCCAAACAGGATTTGCCTCCTCCACGCTCCCTACACACCTGAGATGTAACTGGCAG
TCAGTGTTCACTCAGGACCTAGGATTAGAAAATGGCAGAGTTGGTGCTGGATCCACCTTGCACCTTCTATCAAGCC
CTGTTCTTTTTCTCCAGCCTGAAGTCTTCGGCAAATAGCTCAGAGGGACACGGTCTTGCTCTCAGTGCTTATT
TTAGTGGGAAAAACAGCTAATACCAGGGGTACAAACATTGGCTCCCAAGGAAGTGGATCACCCAACAGCCAGCCA
GCCACATTTCCCTGTGTCTGGCTAGAGCCACCATTAGACTCAGACAGAATGCTTCAGGAATCGTTGTACCCCTT
CAACTGGAGCAGGACGGAAGGTTGTCTGTACTTTGGGAGGGAGTGGGGAGTGGTGGGAAGGGAGTTGCTTGTACA
CGAATCAGGAACTGCTCTCCCTCAGCTGGGCTGGGGTCTCCAGGGACCTGAGCTACATGCAGGTTGTGAGCTGG
AAAAGAAAGTTCTAGACTGTGGCCCAGAATAGGGCTGGGGCAGCTCCAGAGAATGAATAGTGCTGTTTCTCTATT
GGACTGATA

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FIGURE 3207

MAGKRS GWSRAALLQ LLLGVNLV VMPPT RARSLRFV TLLYRH GDRSP VKTYP KDPYQ EEEWP QGF'G QLTKE GMLQ
HWELG QALRQ RYHGFL NTSYHR QEYVVR STD FDR TLMSAEAN LAGLF PPNGM QRFPNP NISWQ PIPVHT VPITEDR
LLKFPL GPCPRYEQ LQNETR QTPEYQ NESSRNA QFLDM VANETGLT DLTLET VWNVYD TLFCEQ THGLRL PPWAS
PQTMQ RLSRLKDFS FRFLFG IYQQA EKARL QGGVLLAQ IRKNLT LMATTS QLPKLL VYSAHD TTLVAL QMALDVY
NGEQAP YASCHIFELY QEDSGNFS VEMYFR NESDKAPW PLSLP GCPHRCPL QDFLRLTE PVVPKDWQQ ECQLASG
PADTEVIVALAVCGSILFLLIV LLLTVLFRMQA QPPGYRHVADGEDHA

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FIGURE 3208

GAGCTCCAAGCTGGTTTGAACAAGCCCTGGGCATGTTTGGCGGGAAGTTGGCTTAGCTCGGCTACCTGTGGCCCC
GCAGTTTTGTAGTCCCCGCCTTGTTTCTCCCCAGAGGCCTCTCAATCCTCCCTCCATGATCTTCGCATAGAGCAC
AGTACCCCTTTCACACGGAGGACGCGATGGCTCCCAAGAAACGCCAGAAACCCAGAAGACCTCCGAGATTGTATT
ACGCCCCAGGAACAAGAGGAGCAGGAGTCCCTGGAGCTGGAGCCCCGAGGCCAAGAAGCTCTGTGCGAAGGGCTC
CGGTCTTAGCAGAAGATGTGACTCAGACTGCCTCTGGGTGGGGCTGGCTGGCCACAGATCCTGCCACCATGCCG
CAGCATCGTCAGGACCCTCCACCAGCATAAGCTGGGCAGAGCTTCCTGGCCATCTGTCCAGCAGGGGCTCCAGCA
GTCCTTTTTGCACACTCTGGATTCTTACCGGATATTACAAAAGGCTGCCCCCTTTGACAGGAGGGCTACATCCTT
GGCGTGGCACCCAACTCACCCAGCACCGTGGCTGTGGGTTCCAAAGGGGGAGATATCATGCTCTGGAATTTTGG
CATCAAGGACAAACCCACCTTCATCAAAGGGATTGGAGCTGGAGGGAGCATCACTGGGCTGAAGTTTAAACCTCT
CAATACCAACCAGTTTTACGCCTCCTCAATGGAGGGAACAACCTAGGCTGCAAGACTTTAAAGGCAACATTCTACG
AGTTTTTTGCCAGCTCAGACACCATCAACATCTGGTTTTGTAGCCTGGATGTGTCTGCTAGTAGCCGAATGGTGGT
CACAGGAGACAACGTGGGGAACGTGATCCTGCTGAACATGGACGGCAAAGAGCTTTGGAATCTCAGAATGCACAA
AAAGAAAGTGACGCATGTGGCCCTGAACCCATGCTGTGATTGGTTTCTGGCCACAGCCTCCGTAGATCAAACAGT
GAAAATTTGGGACCTGCGCCAGGTTAGAGGGAAAGCCAGCTTCCTCTACTCGCTGCCGCACAGGCATCCTGTCAA
CGCAGCTTGTTTTAGTCCCGATGGAGCCCGGCTCCTGACCACGGACCAGAAGAGCGAGATCCGAGTTTACTCTGC
TTCCAGTGGGACTGCCCCCTGGGCCTGATCCCGCACCCCTCACCGTCACTTCCAGCACCTCACACCCATCAAGGC
AGCCTGGCATCCTCGCTACAACCTCATTGTTGTGGGCCGATACCCAGATCCTAATTTCAAAAAGTTGTACCCCTTA
TGAATTGAGGACGATCGACGTGTTTCGATGGAACTCAGGGAAGATGATGTGTCAGCTCTATGACCCAGAATCTTC
TGGCATCAGTTTCGCTTAATGAATTCATCCCATGGGGGACACGCTGGCCTCTGCAATGGGTTACCACATTCTCAT
CTGGAGCCAGGAGGAAGCCAGGACACGGAAGTGAGAGACACTAAAGAAGGTGTGGGCCAGACAAGGCCTTGGAGC
CCACACATGGGATCAAGTCCTGCAAGCAGAGGTGGTGATTTGTTAAAGGGCCAAAAGTATCCAAGGTTAGGGTTG
GAGCAGGGGTGCTGGGACCTGGGGCACTGTGGGACTGGGACACTTTTATGTTAATGCTCTGGACTTGCTCCAGÀ
GACTGCTCCAGAGTTGGTGACACAGCTGTCCCAAGGGCCCCCTCTGTATCTAGCCTGGAACCAAGGTTATCTTGGA
ACTAAATGACTTTTCTCCTCTCAGTGGGTGGTAGCAGÀGGGATCAAGCAGTTATTTGATTTGTGCTCTTTTGATA
TGGCCAATAAAACCATACCG

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FIGURE 3209

MAPKKRPETQKTSEIVLRPRNKRSPLELEPEAKKLCAGSGPSRRCDSDCLWVGLAGPQILPPCRSIVRTLHQ
HKLGRASWPSVQQGLQQSFLHTLDSYRILQKAAPFDRRATSLAWHPHPSTVAVGSKGGDIMLWNFGIKDKPTFI
KGIGAGGSITGLKFNPLNTNQFYASSMEGTTRLQDFKGNILRVFASDITINIWFCSLDVSASSRMVVTGDNVGNV
ILLNMDGKELWNLRMHKKKVTHVALNPCCDWFLATASVDQTVKIWDLRQVRGKASFLYSLPHRHPVNAACFSPDG
ARLLTTDQKSEIRVYSASQWDCPLGLIPHPHRHFQHLTPIKAAWHPRYNLIVVGRYPDPNFKSCTPYELRTIDVF
DGNSGKMMCQLYDPESGSSLNENPMGDTLASAMGYHILIWSQEEARTRK

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[illegible]

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FIGURE 3211

MAPEEDAGGEALGGSFWEAGNYRRTVQRVEDGHRLCGDLVSCFQERARIEKAYAQQADWARKWRGTVEKGPQYG
TLEKAWHAFFTAERLSALHLEVREKLQGQDSERVAWQRGAFHRPVLGGFRESRAAEDGFRKAQKPWLKRLKEV
EASKKSYHAARKDEKTAQTRESHAKADSAVSQEQLRKLQERVERCAKEAEKTKAQYEQTAEHLHRYTPRYMEDME
QAFETCQAAERQRLFFKDMLLTQHLDLSSEKFHELHRDLHQGIEAASDEEDLRWWRSTHGPGMAMNWPQFE
EWSLDTQRTISRKEKGGRSPDEVTLTSIVPTRDGTAPPPQSPGSPGTGQDEEWSDEESPRKAATGVRVRALYDYA
GQEADELSFRAGEELLKMSEDEQGWCGQLQSGRIGLYPANYVECVGA

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FIGURE 3212

TGGGAAGGAGAGAAATGGCGGGCGGAGCCGAACAAGACCGAAATCCAGACTCTTTTTAAGAGGCTTCGCGCAGTT
CCAACCAACAAGGCCTGTTTCGACTGCGGCGCCAAGAATCCGAGTTGGGCCAGCATCACGTACGGTGTTTTCTTG
TGCATTGACTGTTCCGGGGTGCACCGCTCCCTGGGCGTCCATCTGAGCTTCATCAGGTCCACAGAGTTGGATTCC
AACTGGAAGTGGTTCCAGCTGAGGTGTATGCAGGTGCGCGGGAATGCCAATGCGACGGCTTTTTTTCGCCAACAT
GGATGCACAGCCAATGATGCCAACACCAAATATAATAGCCGAGCTGCCCAGATGTACCGGGAGAAGATCCGGCAG
CTGGGGAGTGCGGCCCTGGCTAGGCATGGCACTGATCTTTGGATAGACAACATGAGTAGTGCCGTTCTTAATCAC
TCCCCAGAGAAGAAGGACTCTGATTTCTTCACAGAACACACTCAACCCCTGCCTGGGATGCGCCAGCCACTGAG
CCTTCAGGGACCCAGCAGCCAGCCCCGTCTACAGAGAGCAGTGGCCTGGCACAGCCGGAGCATGGCCCCAACACA
GACCTGCTTGGCACCTCACCCAAAGCCTCACTGGAAGTGAAGCTCCATCATTGGCAAGAAGAAGCCAGAGCTT
CAGTGAGATTGAGCGGCAGGCTCAGGTGGCAGAGAAGCTCCGTGAGCAGCAGGCAGCCGATGCCAAGAAGCAGGC
GGAGGAGTCCATGGTCGCCTCCATGCGTCTGGCCTACCAGGAGCTCCAGATTGATCGTAAGAAAGAGG

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FIGURE 3213

MAAEPNKTEIQTLFKRLRAVPTNKACFDCGAKNPASWASITYGVFLCIDCSGVHRS LGVHLSFIRSTELDSNWNWF
QLRCMQVGGNANATAFFRQHGTANDANTKYNRAAQMYREKIRQLGSAALARHGTDLWIDNMSSAVPNHSPEKK
DSDFFTEHTQPPAWDAPATEPSGTQQPAPSTESSGLAQPEHGPNTDLLGTSPKASLELKSSIIIGKKKPAAAKKGL
GAKKGLGAQKVSSQSFSEIERQAQVAEKLREQQAADAKKQAEESMVASMLAYQELQIDRKKEEKKLQNLGKKR
EQAERLGMGLVSRSSVSHSVLSEMQVIEQETPVSAKSSRSQDLDFDDVGTFASGPPKYKDNPFSLGESFGSRWDT
DAAWGMDRVEEKEPEVTISSIRPISERATNRREVESRSSGLESSEARQKFAGAKAISSDMFFGREVDAEYEARSR
LQQLSGSSAISSSDLFGDMGAGAGSVSLGNVLPTADIAQFKQGVKSVAGKMAVLANGVMNSLQDRYGSY

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FIGURE 3214

GAAAAAGGGGGTTTCGTTTACATGCTGTGAGATCACCGCAAACCTACCTCACTGTGTTGAAACGGGACAAATACA
ATAGAACGCATTGGGTGGTGTGTGTCTGATCCTGGGTTCTTGTCTCCCTAAATGCTGCCCCCAAGTTACTGTA
TTTGTCTGGGCTTTGTAGGACTTCACTAAGTTGATTGCTAGGTGGCCTAGTTTGTGTAAATATAATGTATTGGTC
TTCTCCGTGTTCTTTGGGGGTTTTGTTTACAAAGTTCTTTTTGTATTGAGAGAAAAATAGCCAAAGCATCTTTG
ACAGAAGTTTCTGCACCAGGCAAAAAGATCTGAAACATTAGTTTGGGGGGCCCGCTTCTTAAAGTGGGGATCTTG
AACCATCCTTTCTTTTGTATTCCCTTCCCTATTACCTATTAGACCAGATCTTCTGTCCTAAAAACTTGTCTTC
TACCCTGCCCTCTTTTCTGTTCACCCCAAAAGAAAACCTTACACACCCACACACATACACATTTAATGCTTGGAG
TGTCTCCACAACCTCTTAAATGATGTATGCAAAAATCCTGAAGCTAGGAAAACCTCCATCCCTTGTCCCAACCT
CCTAAGTCAAGACCATTACCATTTCTTTCTTTTTTTGGTGGGGGGGGGGGGGTGGATGGAGTCTCGCTCTGTCCG
CCAGGCGGAGGTTGCAGTGAGCTGAGATCGCACCCTGCACTCCAGCCTGGTTACAGAGCAAGACCCTGTCTCGA
AAAAAAAAAAAAAACAACAAAAAACCACACTACTGTATTTGGATGGATCAAACCTACTTACTTTT
AATTTCTAATCCTAAAGTAAAGAGATGCAATTGGGGGCCCTTCCATGTAGAAAGTGGGGTCAGGAGGCCAAGAAAG
GGAATATGAATGTATATCCAAGTCACTCAGGAACCTTTATGCAGGTGGTAGAACTTATGTCAAAGTGGCCACAA
GATTGTTTAATAGGAGATGAATGAATGTAATCCATGTTTACTGCTAGAAACCAAAGCTTTGTGTAAATCTTGA
ATTTATGGGGAGGGAGGGTAGGAAAGCCTGTACCTGTCTGTTTTTTTCTGATCCTTTTCCCTCATTCTGAACT
GCAGGAGACTGAGCCCCCTTTGGGCTTTGGTGACCCCATCACTGGGGTGTGTTTATTTGACGGTTGATTTTGCTGT
ACTGGGTACTTCCTTTCCCATTTTCTCATCATTTTTTAACACATGCTGACTCTTCCCTTCCCTTCTCCTTTCCCT
GGGAAAATACAATGAATAAATAAAGACTTACTGGTAC

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FIGURE 3215

GAATTCCGTACGGCTTCCGGTGGCGGGACGCGGGGCCGCGCACGCGGGAAAAAGCTTCCCCGGTGTCCCCCATCC
CCCTCCCCGCGCCCCCCCCCGCTCCCCCAGCGCGCCACCTCTCGCGCCGGGGCCCTCGCGAGGCCGCGAGCCTG
AGGAGATTCCCAACCTGCTGAGCATCCGCACACCCACTCAGGAGTTGGGGCCAGCTCCCAGTTTACTTGTTTC
CCTTGTGCAGCCTGGGGCTCTGCCAGGCCACCACAGGCAGGGGTCGACATGGCAGAGACTGGAGTTCAACGA
CGTCTATCAGGAGGTGAAAGGTTCCATGAATGATGGTCGACTGAGGTTGAGCCGTCAGGGCATCATCTTCAAGAA
TAGCAAGACAGGCAAAGTGGACAACATCCAGGCTGGGGAGTTAACAGAAGGTATCTGGCGCCGTGTTGCTCTGGG
CCATGGACTTAAACTGCTTACAAAGAATGGCCATGTCTACAAGTATGATGGCTTCCGAGAATCGGAGTTTGAGAA
ACTCTCTGATTTCTTCAAACTCACTATCGCCTTGAGCTAATGGAGAAGGACCTTTGTGTGAAGGGCTGGAAGT
GGGGACAGTGAAATTTGGTGGGCAGCTGCTTTCTTTGACATTGGTGACCAGCCAGTCTTTGAGATAACCCCTCAG
CAATGTGTCCAGTGCACCACAGGCAAGAATGAGGTGACACTGGAATTCCACCAAAACGATGACGCAGAGGTGTC
TCTCATGGAGGTGCGCTTCTACGTCCCACCCACCCAGGAGGATGGTGTGGACCTGTTGAGGCCCTTTGCCAGAA
TGTGTTGTCAAAGGCGGATGTAATCCAGGCCACGGGAGATGCCATCTGCATCTTCCGGGAGCTGCAGTGTCTGAC
TCCTCGTGGTCTGTTATGACATTTCGGATCTACCCACCTTTCTGCACCTGCATGGCAAGACCTTTGACTACAAGAT
CCCCTACACCACAGTACTGCGTCTGTTTTTGTACCCACAAGGACCAGCGCCAGATGTTCTTTGTGATCAGCCT
GGATCCCCCAATCAAGCAAGGCCAAACTCGCTACCACTTCCTGATCCTCCTCTTCTCCAAGGACGAGGACATTTT
GTTGACTCTGAACATGAACGAGGAAGAAGTGGAGAAGCGCTTTGAGGGTCGGCTCACCAAGAACATGTCAGGATC
CCTCTATGAGATGGTCAGCCGGGTCTGAAAGCACTGGTAAACCACAAGATCACAGTGCCAGGCAACTTCCAAGG
GCACTCAGGGGCCAGTGCATTACCTGTTCTTACAAGGCAAGCTCAGGACTGCTCTACCCGCTGGAGCGGGGCTT
CATCTACGTCCACAAGCCACCTGTGCACATCCGCTTCGATGAGATCTCCTTTGTCAACTTTGCTCGTGGTACCAC
TACTACTCGTTCCTTTGACTTTGAAATTGAGACCAAGCAGGGCACTCAGTATACCTTCAGCAGCATTGAGAGGGA
GGAGTACGGGAACTGTTTGATTTGTCAACGCGAAAAAGCTCAACATCAAAAACCGAGGATTGAAAGAGGGCAT
GAACCCAAGCTACGATGAATATGCTGACTCTGATGAGGACCAGCATGATGCCTACTTGAGAGGATGAAGGAGGA
AGGCAAGATCCGGGAGGAGAATGCCAATGACAGCAGCGATGACTCAGGAGAAGAAACCGATGAGTCATTCAACCC
AGGTGAAGAGGAGGAAGATGTGGCAGAGGAGTTTGACAGCAACGCCTCTGCCAGCTCCTCCAGTAATGAGGGTGA
CAGTGACCGGGATGAGAAGAAGCGGAAACAGCTCAAAAAGGCCAAGATGGCCAAGGACCGCAAGAGCCGCAAGAA
GCCTGTGGAGGTGAAGAAGGGCAAAGACCCCAATGCCCCCAAGAGGGCCATGCTCTGCATACATGCTGTGGCTCAA
TGCCAGCCGAGAGAAGATCAAGTCAGACCATCCTGGCATCAGCATCACGGATCTTTCCAAGAAGGCAGGCGAGAT
CTGGAAGGGAATGTCCAAAGAGAAGAAAGAGGAGTGGGATCGCAAGGCTGAGGATGCCAGGAGGGACTATGAAAA
AGCCATGAAAGAATATGAAGGGGGCCGAGGCGAGTCTTCTAAGAGGGACAAGTCAAAGAAGAAGAAGAAAGTAAA
GGTAAAGATGGAAGAAGAAATCCACGCCCTCTAGGGGCTCATCATCAAGTCGTCCTCAAGGCAGCTAAGCGAGAG
CTTCAAGAGCAAAGAGTTTGTGTCTAGTGATGAGAGCTCTTCGGGAGAGAACAAAGAGCAAAAAGAAGAGGAGGAG
GAGCGAGGACTCTGAAGAAGAAGAACTAGCCAGTACTCCCCCAGCTCAGAGGACTCAGCGTCAGGATCCGATGA
GTAGAAACGGAGGAAGGTTCTCTTTGCGCTTGCTTCTCACACCCCCGACTCCCCACCCATATTTTGGTACCAG
TTTCTCCTCATGAAATGCAGTCCCTGGATTCTGTGCCATCTGAACATGCTCTCCTGTTGGTGTGTATGTCACTAG
GGCAGTGGGGAGAGCTTAACTCTGCTGCTTCCCAAGGATGGCTGTTTATAATTTGGGGAGAGATAGGGTGGGA
GGCAGGGCAATGCAGGATCCAAATCCTCATCTTACTTTCCCGACCTTAAGGATGTAGCTGCTGCTTGTCTGTTT
AAGTTGCTGGAGCAGGGGTCATGTGAGGCCAGGCCGTGATGCTCTACCTGGGGCCTATTTCTACTTTTCAATTTGT
ATTTCTGGTCTGTGAAAAATGATTTAATAAAGGGAAGTACTTTGGAAACCAAAAAAAGGAATTC

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FIGURE 3216

MAETLEFNDVYQEVKGSMDGRLRLSRQGIIFKNSKTGKVDNIQAGELTEGIWRRVALGHGLKLLTKNGHVYKYD
GFRESEFEKLSDFFKTHYRLELMEKDL CVKGNWGT VKFGGQLLSFDIGDQPVFEIPLSNVSQCTTGKNEVTLEF
HQNDDAEVSLMEVRFYVPPTQEDGVDPVEAFAQNVL SKADVIQATGDAICIFRELQCLTPRGRYDIRIYPTFLHL
HGKTFDYKIPYTTVLRLFLPHKDQRQMFFVISLDPPIKQGQTRYHFLILLFSKDEDISLTLNMNEEEVEKRFEG
RLTKNMSGSLYEMVSRVMKALVNRKITVPGNFQGHSGAQCSYKASSGLLYPLERGFYVHKPPVHIRFDEIS
FVNFARGTTTTTSFDFEIETKQGTQYTFSSIEREEYGKLFDFVNAKKLNIKNRGLKEGMNPSYDEYADSDQHD
AYLERMKEEGKIREENANDSSDSSGEETDESFPNGEEEDVAEEFDSNASASSSSNEGDSRDEKKRQLKKAKM
AKDRKSRRKPVEVKKGKDPNAPKRPM SAYMLWLNASREKIKSDHPGISITDLSKKAGEIWKGMSKEKKEEWDKA
EDARRDYEKAMKEYEGGRGESSKRDKSKKKKKVKVKMEKKSTPSRGSSSKSSSRQLSESFKSKEFVSSDESSSGE
NKSKKKRRRSEDSEEEELASTPPSSSED SASGSDE

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FIGURE 3217

ATGGCCTCCACGAAGTTGATAATGCAGAGCTGGGGTCAGCCTCTGCCCATGGTACCCAGGCAGTGAGGCGGGA
CCAGAAGAGCTGAATACTTCTGTCTACCAGCCCATAGATGGATCACCAGATTATCAGAAAGCAAAATTACAAGTT
CTTGGGGCCATCCAGATCCTGAATGCAGCAATGATTCTGGCTTTGGGTGTCTTTCTGGGTTCCCTTGCAATACCCA
TACCACTTCCAAAAGCACTTCTTTTTCTTCACCTTCTACACAGGCTACCCGATTTGGGGTGCTGTGTTTTCTGT
AGTTCAGGAACCTTGTCTGTTGTAGCAGGGATAAAACCCACAAGAACATGGATACAGAACAGTTTTGGAATGAAC
ATTGCCAGTGCTACAATTGCACTAGTGGGGACTGCTTTTCTCTCACTAAATATAGCAGTTAATATCCAGTCATTA
AGGAGTTGTCACTCTTCATCAGAGTCACCGGACCTATGCAATTACATGGGCTCCATATCAAATGGCATGGTGTCT
CTACTGCTGATTCTCACCTTGCTGGAATTATGCGTAACCATCTCTACCATAGCCATGTGGTGCAATGCAAACTGC
TGTAATTCAAGAGAGGAAATTTCTCTCACCTCCCAATTCTGTGTAA

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FIGURE 3218

AGGTTTCGGCGGGGGCTGCACGTGCGCAGGGGTGTGGAACTTACCGGCTGAGCCATGGATACACCGTTAAGGCG
CAGCCGACGGCTGGGAGGCCTAAGGCCCGAATCCCCGAGAGCCTCACCTCAGTTTCGCGGACGAGACGGGCCCT
TGTGGAGTTCGAGTCGAACCCAGAAGAAACGAGGGAGCCCGGGTCTCCTCCGAGTGTGCAGCGGGCTGGCCTGGG
GTCCCCCGAAAGGCCGCCGAAGACAAGCCAGGATCACCCCGTCTGCAGCAGGGTGCAGGCTTGGAGTACCCCCA
AGGGCAGCCAGAGCCAGGCGCAGCGTCCCCCAGCGTCAGCAAGACCTACACCTGGAGTCGCCTCAAAGACAGCC
AGAGTACAGTCCTGAATCCCCACGATGTCAGCCGAAGCCAAGTGAGGAGGCACCAAAGTGTTCTCAGGACCAGGG
AGTACTGGCCTCGGAGTTGGCCCCAGAATAAGGAGGAGCTGACCCCGGGGGCCCCCAGCATCAGTACCGCCGGT
CCCAGGATCACCAGAGCCTTACCCCGGTGAGCAAGCTCCCGGTCCGGAGCCCTCTCAGCCACTACTGGAGCTGAC
ACCCAGGGCACCTGGCTCCCCCGGGGTGAGCATGAGCCGAGCAAGCCACCTCCAGCTGGGGAGACGGTGACAGG
CGGCTTCGGGGCAAAGAAGCGAAAAGGTTCTTTCATCCAGGCCCCAGCGTCCAAGAAGTTGAATAAAGAGGAGCT
TCCTGTAATCCCGAAGGGGAAGCCCCAAATCGGGGCGAGTGTGGAAGGACCGCTCCAAGAAAAGATTCTCCAGAT
GCTTCAGGACAAGCCCTGCGCACATCGTGGCAGCGGAAGATGAAGGAACGACAGGAGAGGAAGCTGGCCAAGGA
CTTTGCCCGTCACCTGGAGGAGGAGAAGGAGAGGGCGCCGCCAGGAGAAGAAACAGCGCCGGGCTGAGAACCTGAA
ACGCCGCTGGAGAATGAGCGGAAGGCAGAGGTGCTCCAAGTGATCCGAAACCCCGCCAAGCTCAAGCGGGCAA
GAAGAAGCAGCTGCGCTCCATTGAGAAGCGGGACACCCTGGCCCTGCTGCAGAAGCAGCCGCCCCAGCAGCCGGC
AGCCAAGATCTGAGCTCAGGACGGCCCCGAGGCCTTCCATGGCCAACGACCATGTCAGACACAGCACCTCAGGCCG
CTGCTCAGATGCCTCTGCTGGAGCTGGCACTCCAAACCCATGGCTCCAGAACGGGGACCCCCACCCCGACCGGGG
CTCCTCGGCCTTTGAAGGCTTCCAGGCAGGTCTGTGTGGGACAGAAGCCCAGAGGGGGCCTGGGACCTGGCAGAG
ATGGGGGCGGGAAGAGATTGAGTCCCATCCCTCCTTCTCCTTCTCCAAGTGCCTTCAAACCAAGAACTGTA
CATTCTTCTGGTTCTCAGTGAGCTGGTGACTGGCAGGTGACTCCCTCAGCAGTGTATGCCCTTTCTCAGCATCC
TAGGTCCATCCCAGGCCTGGAGGCTGACAGTTGGGAATCCAGCTTCCCCCACACCTTCCCAAAGGCTGCTCTGAG
CACCTCCACACCCCACTGCCTCTGTCCCCAGCAAATGAATCCGGTTCCTCTCCACTTTTCAATACTGAAAGATT
AAAATGGGGAGGTTGCAGGGAGCAGAGCTTTTCCCTAGCACCCACTTTCCCAAACCAAGTCTCTGCAGAAGCCCCA
GAGAACTAACTCATGCCTGTCCAGTCTACAGCAAAAATATTTATTGAGTGCCTGTTGCATACAGGCACAATCCT
AGGCACCGGCAAAATACAGACAATAGACCAAAGTCCCTGCCCTCGAGGAGCTTTCATTCTGATGGAGAGAAAACAT
AATAACAAGCAAAATGCAAAAAAAAAAAAAAAAAA

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FIGURE 3219

MDTPLRRSRRLGGLRPESPELTSVSRTRRALVEFESNPEETREPGSPPSVQRAGLGSPERPPKTSFGSPRLQQG
AGLESPQGQPEPGAASPORQDLHLESPQRQPEYSPESPRCQPKPSEEAPKCSQDQGVLAELAQNKEELTPGAP
QHQLPPVPGSPEFYPGQQAQFGEPSQPLLELTPRAPGSPRGQHEPSKPPFAGETVTGGFGAKKRKGSSSQAPASK
KLNKEELPVIPKGPKSGRVWKDRSKKRFSQMLQDKPLRTSWQRKMKERQERKLAKDFARHLEEEKERRRQEKKQ
RRAENLKRRLENERKAEVVQVIRNPAKLKRAKKKQLRSIEKRDTLALLQKQPPQQAQPAKI

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FIGURE 3220

AATTCCGGCACGAGGAGGTGCTGAAGGCTGTGGCGCGGGCTGTCCCCATTCCCACGTGAAGCGCTACGCTAGCAT
CGCTCGGCTGGCGGCTCCCAGCTCGCCGCGGAGCAGTCCCGGCAGCAGCGGGGGACCGGAAGTGGCTCGCGGAGG
CTCAGAAGCTAGTCCCGGAGCCCGGCGTGTGGCGCCTCGGAGCACGGTGACGGCGCCATGTCCTTAATCTGCTCC
ATCTCTAACGAAGTGCCGGAGCACCCATGTGTATCCCCTGTCTCTAATCATGTTATGAGCGGCGGCTCATCGAG
AAGTACATTGCGGAGAATGGTACCGACCCCATCAACAACCAGCCTCTCTCCGAGGAGCAGCTCATCGACATCAAA
GTTGCTCACCCAATCCGGCCCCAAGCCTCCCTCAGCCACCAGCATCCCGGCCATTCTGAAAGCTTTGCAGGATGAG
TGGGATGCAGTCATGCTGCACAGCTTCACTCTGCGCCAGCAGCTGCAGACAACCCGCCAAGAGCTGTCACACGCT
CTGTACCAGCACGATGCCGCTGCCGTGTCATTGCCCGTCTCACCAAGGAAGTCACTGCTGCCCCGAGAAGCTCTG
GCTACCCTGAAACCACAGGCTGGCCTCATTGTGCCCCAGGCTGTGCCAAGTTCCCAACCAAGTGTGTGGGTGCG
GGTGAGCCAATGGATTTGGGTGAGCTGGTGGGAATGACCCAGAGATTATTGAGAAGCTTCAAGACAAAGCCACT
GTGCTAACACGAGCGCAAGAAGAGAGGGAAGACTGTGCCTGAGGAGCTGGTGAAGCCAGAAGAGCTCAGCAAA
TACCGGCAGGTGGCATCCCACGTGGGGTTGCACAGTGCCAGCATTCTCGGGATCCTGGCCCTGGACCTCTGCCCC
TCCGACACCAACAAGATCCTCACTGGTGGGGCGGATAAAAATGTCGTTGTGTTTGACAAAAGTTCTGAACAAATC
CTGGCTACCCTCAAAGGCCATACCAAGAAGGTCACCAGCGTGGTGTTCACCCCTCCAGGACCTGGTGTTCCT
GCTTCCCCCGATGCCACTATCAGGATTTGGTCGGTCCCCAATGCCTCTTGTGTACAGGTGGTTCGGGCCCCATGAG
AGTGCTGTGACAGGCCTCAGCCTTCATGCCACTGGCGACTATCTCCTGAGCTCCTCCGATGATCAGTACTGGGCT
TTCTCTGACATCCAGACAGGGCGTGTGCTCACCAAGGTGACAGATGAGACCTCCGGCTGCTCTCTCACCTGTGCA
CAGTTCACCCCTGACGGACTCATCTTTGGAACAGGAACCATGGACTCTCAGATCAAGATCTGGGACTTGAAGGAA
CGTACTAATGTGGCCAACCTTCCCTGGCCACTCGGGCCCCATCACTAGCATCGCCTTCTCTGAGAATGGTTACTAC
CTGGCTACAGCGGCTGATGACTCCTCTGTCAAGCTCTGGGATCTGCGCAAGCTTAAGAACTTTAAGACTTTGCAG
CTGGATAACAACCTTTGAGGTAAAGTCACTGATCTTTGACCAGAGTGGTACCTACCTGGCTCTTGGGGGCACGGAT
GTCCAGATCTACATCTGCAAACAATGGACGGAGATTCTTCACTTTACAGAGCACAGTGGCCTGACCACAGGGGTG
GCCTTCGGGCATCACGCCAAGTTCATCGCTTCAACAGGCATGGACAGAAGCCTCAAGTTCACAGCCTGTAGGCC
CTGGCCCTTCTGATGGAAGCTGGGCCTCATCTCAGTAGAGGGGTAGAATTAGGGTTTGGGGGGGGGTGGGGGA
ATCTATGGGGGGAGGGGGCTCTGTGGGGTGGGACATTACATCATTTTCACTCTGGTCTGAGTGGTGGCCTGAGAA
CCATGGTGGCATGGACCACCTCATCCATGCAACTCCAGGCCCATGGGAACGGATGTGGAAGGAAGAACTGTCA
CCCTCTTAAGGCCAGGGTCGGAGCCCAGGGCCTCTCCCTTCTGTGTTCAATGGACGTGGTGGTGGCTGTTCC
ACACCCATTTTGTGTCAGTTCTGTGAGACAGGAGAGGCTGAGCCAAGGGAAGTGTGAAGGGGATGGGCAGGAGG
GCTTGTGCAGGGTTTTGTAAGCAGTGATCTAGTTTCATTAAGGGAAGGAAACAATAACCATAACCAC

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FIGURE 3221

MSLICSI SNEVPEHPCVSPVSNH VYERRLIEKYIAENGTD PINNQPLSEEQLIDIKVAHP I RPKPPSATSIPAIL
KALQDEWDAV MLHSFTLRQQLQTT RQELSHALYQHDAACRV IARLTKEVTAAREALATLKPQAGLIVPQAVPSSQ
PSVVGAGEPMDLGELVGMTPEIIQKLQDKATVLTTERKKRGKTVPEELVKPEELSKYRQVASHVGLHSASIPGIL
ALDLCPSDTNKILTGGADKNVVVFDKSSEQILATLKGHTKKVTSVVFHPSQDLVFSASPDATIRIWSVPNASCVO
VVRAHESAVTGLSLHATGDYLLSSDDQYWAFSDIQTGRVLTKVTDETSGCSLTCAQFHPDGLIFGTGTMDSQIK
IWDLKERTNVANFP GHSGPITSIAFSENGYYLATAADDSSVKLWDLRKLKNFKTLQLDNNFEVKS LIFDQSGTYL
ALGGTDVQIYICKQWTEILHFTEHSGLT TGVAFGHHAKF IASTGMDRSLKFYSL

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FIGURE 3222

ATTGTCTGGGAATTGCAGCCGCGGGGCGGGCGGGCGGGCGGGCGGGCGGGCGGGGACCCAGCGGGCCAGGTGGG
GACGGCGCGGAGCGGGTGCAGGAGATGCCGTGCGGGACTGGGGCCACCTGAGCCGCCGCCCTCGTCCCCGCCTTC
TGTGGGAAGGATGTGCGCGCGGATGGCCGGTCGCACAACAGCGGCCCTCGGGGGCCCTACGGCCCTTGCTCTG
CCTCCTGGTGGCCCTCGCCCTGGACGTCTGAGAGTGGACTGTGGCCAGGCTCCCTTGACCCCTGTCTACCTGCA
TGTGACAGCCGCCCGCCAGCCAGCCACACTCTGGACTGCCAAGCTGACCGCTTCAAGGGCTCCAGGCACCA
CACCACCCTCATCAGCTGCCACCGTGTGGGCTCACAGAGCCAGATTCCAGCAGTCCCCTTGAAGTGTCTGAGTT
CCTATGGGTGGACTTTGTGGTGGAGAATAGCACTGGTGGGGCGTAGCGGTCACTCGCCCCGTACGTGGCAGCT
GGAGTACCCAGGCCAGGCCCTGAAGCAGAGAAGGACAAAATGGTGTGGGAAATCCTGGTGTCTGAGCGGGACAT
CAGAGCCCTTATCCCACTGGCCAAGGCTGAGGAGCTGGTGAATACAGCACCACTGACTGGAGTGCCCCAGCATGT
CCCCGTGCGCCTTGTCACTGTGGACGGCGGGGGGGCCTTGGTGGAGGTGACAGAGCATGTGCGCTGCGAGTCTGC
CAACACACAGGTCTGCAGGTGTCTGAGGCCTGTGATGCCGTGTTCTGGCTGGCAAGGAGAGCCGGGGCGCCCCG
GGGGGTGCGAGTGGACTTCTGGTGGCGCCGGCTCCGCGCCTCGCTGCGGCTGACCGTGTGGGCCCCCTGCTACC
GCTGCGTATCGAGCTCACCAGACACCACCCTCGAGCAGGTCCGCGGCTGGAGGGTACCTGGCCCTGCTGAAGGGCC
TGCGGAACCCGCTGCAGAGGCGTCGGATGAGGCCGAGCGGCGCGCCCGTGGCTGCCACCTGCAGTACCAGCGGGC
CGGTGTGCGCTTCCTCGCCCCCTTCGCGGGCCACCCGCTGGACGGCGGGCGCCGCCCTCACGCACCTGCTTGGCCC
CGACTGGCTGCTAGACGTGTCCACCTCGTGGCGCCACACGCCCGCTGCTGGACTCGCGTGTAGCCTCTCTGGA
GGGTGGCCGTGTCTGGTGGGCGGGAGCCCGGTGTCACTCCATTGAGGTGCGTTCCCCACTGTCTGACTCCAT
CCTGGGGGAGCAGGCGCTGGCTGTGACGGACGACAAGGTCTCAGTGTGGAGCTGAGGGTGACGCCAGTGATGGG
CATCTCGCTGACCTTGAGCCGGGGCACTGCCACCCCGGGGAGGTACAGCTACGTGCTGGGCACAGTCAGCCCT
TCCCGCCCCAAAGCAGGAGGTGGCCCTCTCCCTATGGCTGTCTTCTCTGATCACACTGTGGCCCCAGCTGAGCT
CTACGACCGCCGTGACCTGGGACTGTCCGTCTCAGCCGAGGAGCCTGGTGCCATCCTGCCAGCTGAGGAGCAGGG
TGCCAGCTCGGGGTGGTGGTGTGAGTGGGGCAGGCGCCGAGGGGCTGCCGCTGCATGTGGCTCTGCACCCGCCCGA
GCCCTGCCGCCGGGGCGCCACCGTGTGCCCTCTGGCCTCTGGCACCCTGGCTGGGGCTGCCCCCTGCCTCCAC
TCCAGCCCCCTGCTCTCCATCCAGCCCTGCTTGGAGCCACACAGCCACAGAAAGCCACCATGGGTGGTAAACGGCA
GGTGGCAGGCAAGTGTGCGGGGCAACACAGGTGTGAGGGGCAAGTTTGAGCGGGCAGAGGAGGAGGCCAGGAAGGA
GGAGACCGAAGCCAGGGAGGAGGAGGAGGAAGAGGAGGAGGAGATGGTCCCTGCCCTCAGCATGTCACTGAGCT
AGAGCTGGGCATGTACGCCCTGCTGGGAGTCTTCTGCGTGGCCATCTTCATCTTCTTGGTCAATGGTGTGGTCTT
CGTCTGCGCTATCAGCGCAAAGAACCTCCCGACAGTGCCACTGACCCACCTCCCCCAGCCCCACAACCTGGGT
CTGGCTGGGCACTGACCAGGAGGAAGTGAAGCCAGCTGGACCGGAGTCCCTGGCCCCGCCAAGGGGAGGG
GAGCTGCCCCCTGTGAGAGTGGGGGAGGAGGGGAGGCCCTACCCTGGCCCCCTGGCCCCCTGGGGGCACCAACAG
CTCCTCAAGCACCTGGCCCCAAAGGAGGCTGGGGGGCGCGGAAGCGAGTAGAGTTGTGACATTTGCGCCAGC
CCCTCCAGCCAGTCACCTGAGGAGCCTGTAGGGGGCCCTGCTGTGCAGTCCATCCTTGTGGCAGGCGAGGAGGA
CATCCGCTGGGTGTGTGAGGACATGGGGCTGAAGGACCCTGAGGAGCTTCGCAACTACATGGAGAGGATCCGGGG
CAGCTCCTGACCTCCACAGCCACCTGGTCAGCCACCAGCTGGGGCAACGAGGGTGGAGGTCCCACTGAGCCTCT
CGCCTGCCCCCGCCACTCGTCTGGTGTGTTGATCCAAGTCCCCCTGCCTGGTCCCCACAAGGACTCCCATCCA
GGCCCCCTCTGCCCTGCCCTTGTCAATGGACCATGGTCTGAGGAAGGGCTCATGCCCCCTATTTATGGGAACCA
TTTCATTCTAACAGAATAAACCGAGAAGGAAACAG

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FIGURE 3223A

CAGCGGCAGTGGAGTTCGCTGCGCGCTGTTGGGGGCCACCTGTCTTTTCGCTTGTGTCCCTCTTTCTAGTGTGCG
GCTCGAGTCCCAGCGGGCCGCTCCAAGCCTCGACATGTGCTACAACCTACGTGGTAACGGCCCCAGAAGCCCCACCGC
CGTGAACGGCTGCGTGACCGGACACTTTACTTCGGCCGAAGACTTAAACCTGTTGATTGCCAAAAACACGAGATT
AGAGATCTATGTGGTCAACGCCGAGGGGCTTCGGCCCGTCAAAGAGGTGGGCATGTATGGGAAGATTGCGGTCAT
GGAGCTTTTCAGGCCCCAAGGGGGAGAGCAAGGACCTGCTGTTTATCTTGACAGCGAAGTACAATGCCTGCATCCT
GGAGTATAAACAGAGTGGCGAGAGCATTGACATCATTACGCGAGCCCATGGCAATGTCCAGGACCGCATTTGGCCG
CCCCTCAGAGACCGGCATTATTGGCATCATTGACCCTGAGTGCCGGATGATTGGCCTGCGTCTCTATGATGGCCT
TTTCAAGGTTATTCCACTAGATCGCGATAATAAAGAACTCAAGGCCCTCAACATCCGCCTGGAGGAGCTGCATGT
CATTGATGTCAAGTTCCTATATGGTTGCCAAGCACCTACTATTTGCTTTGTCTACCAGGACCCTCAGGGGCGGCA
CGTAAAAACCTATGAGGTGTCTCTCCGAGAAAAGGAATTCAATAAGGGGCCCTTGGAACAGGAAATGTGCAAGC
TGAAGCTTCCATGGTGATCGCAGTCCCAGAGCCCTTTGGGGGGGCCATCATCATTGGACAGGAGTCAATCACCTA
TCACAATGGTGACAAATACCTGGCTATTGCCCTCCTATCATCAAGCAAAGCACGATTGTGTGCCACAATCGAGT
GGACCCTAATGGCTCAAGATACCTGCTGGGAGACATGGAAGGCCGGCTCTTCATGCTGCTTTTGGAGAAGGAGGA
ACAGATGGATGGCACCGTCACTCTCAAGGATCTCCGTGTAGAACTCCTTGAGAGACCTCTATTGCTGAGTGCTT
GACATACCTTGATAATGGTGTGTGTGTGTGTGTCGGGTCTCGCCTGGGTGACTCCCAGCTTGTGAAGCTCAACGTTGA
CAGTAATGAACAAGGCTCCTATGTAGTGGCCATGGAACCTTTACCAACTTAGGACCCATTGTGATATGTGCGT
GGTGGACCTGGAGAGGCAGGGGCAGGGGCAGCTGGTCACTTGCTCTGGGGCTTTCAAGGAAGGTTCTTTGCGGAT
CATCCGGAATGGAATTGGAATCCACGAGCATGCCAGCATTGACTTACCAGGCATCAAAGGATTATGGCCACTGCG
GTCTGACCCTAATCGTGAGACTGATGACACTTTGGTGCTCTCTTTTGTGGGCCAGACAAGAGTTCTCATGTTAAA
TGGAGAGGAGGTAGAAGAAACCGAAGTATGGGTTTTCGTGGATGATCAGCAGACTTCTTCTGTGGCAACGTGGC
TCATCAGCAGCTTATCCAGATCACTTCAGCATCGGTGAGGTGGTCTCTCAAGAACCCTAAAGCTCTGGTCAGTGAA
TGGAGAGGAGCTCAGGCCAAGAACATCAGTGTGGCCTCCTGCAATAGCAGCCAGGTGGTGGTGGCTGTAGGCAGG
GCCCTCTACTATCTGCAGATCCATCCTCAGGAGCTCCGGCAGATCAGCCACACAGAGATGGAACATGAAGTGGCT
TGCTTGGACATCACCCCATTAGGAGACAGCAATGGACTGTCCCCTCTTTGTGCCATTGGCCTCTGGACGGACATC
TCGGCTCGTATCTTGAAGTTGCCCTCTTTTGAAGTACTGCACAAGGAGATGCTGGGTGGAGAGATCATTCCTCGC
TCCATCCTGATGACCACCTTTGAGAGTAGCCATTACCTCCTTTGTGCCCTTGGGAGATGGAGCGCTTTTCTACTTT
GGGCTCAACATTGAGACAGGTCTGTTGAGCGACCGTAAGAAGGTGACTTTGGGCACCCAGCCACCGTATTGAGG
ACTTTTCGTTCTCTTTCTACCACCAACGTCTTTGCTTGTCTGACCGCCCCACTGTCTATATAGCAGTAACCAC
AAATTGGTCTTCTCAATGTCAACCTCAAGGAAGTGAAGTACATGTGTCCCCTCAATTAGATGGCTATCCTGAC
AGCCTGGCGCTGGCCAACAATAGCACCCCTACCATTTGGCACCATCGATGAGATCCAGAAGCTGCACATTGCGACA
GTTCCCTCTATGAGTCTCCAAGGAAGATCTGCTACCAGGAAGTGTCCCAGTGTTCGGGGTCTCTCCAGCCGC
ATTGAAGTCCAAGACAGAGTGGGGGCACGACAGCCTTGAGGCCAGCGCTAGCACCCAGGCTCTGTCCAGCAGT
GTAAGCTCCAGCAAGCTGTTCTCCAGCAGCACTGCTCCTCATGAGACCTCCTTTGGAGAAGAGGTGGAGGTGCAC
AACCTACTTATCATTGACCAACACACCTTTGAAGTGTCTTCATGCCCACAGTTCCTGCGAGAATGAATATGCCCTC
AGTCTGGTTTCCTGCAAGCTGGGCAAAGACCCCAACACTTACTTCATTGTGGGCACAGCAATGGTGTATCCTGAA
GAGGCAGAGCCCAAGCAGGGTCGCATTGTGGTCTTTTCAAGTATTCGGATGGAAAACCTACAGACTGTGGCTGAAAAG
GAAGTGAAGGGGGCCGTGTACTCTATGGTGGAATTTAACGGGAAGCTGTAGCCAGCATCAATAGCACGGTGGCG
CTCTATGAGTGGACAACAGAGAAGGAGCTGCGCACTGAGTGCAACCACTACAACAACATCATGGCCCTCTACCTG
AAGACCAAGGGCGACTTCATCCTGGTGGGCGACCTTAIGCGCTCAGTGCTGCTGCTTGCCTACAAGCCCATGGAA
GGAACTTTGAAGAGATTGCTCGAGACTTTAATCCCAACTGGATGAGTGCTGTGGAAATCTTGGATGATGACAAT
TTTCTGGGGGCTGAAAATGCCCTTTAAGTTGTTGTGTGTGTAAGGATAGCGCTGCCACCCTGACGAGGAGCGG
CAGCACCTCCAGGAGGTTGGTCTTTTCCACCTGGGCGAGTTTGTCAATGTCTTTTGGCACGGCTCTCTGGTAATG
CAGAATCTGGGTGAGACTTCCACCCCCACACAAGGCTCGGTGCTCTTCGGCACGGTCAACGGCATGATAGGGCTG
GTGACCTCACTGTGAGAGAGCTGGTACAACCTCCTGCTGGACATGCAGAATCGACTCAATAAAGTCATCAAAGT
GTGGGGAAGATCGAGCACTCCTTCTGGAGATCCTTTACACCGAGCGGAAGACAGAACCAGCCACAGGTTTCATC
GACGGTGACTTGATTGAGAGTTTCTGGATATTAGCCGCCCCAAGATGCAGGAGGTGGTGGCAAACCTACAGTAT
GACGATGGCAGCGGTATGAAGCGAGAGGCCACTGCAGACGACCTCATCAAGGTTGTGGAGGAGCTAACTCGGATC
CATTAGCCAAGGGCAGGGGGCCCCCTTTGCTGACCTCCCCAAAGGCTTTGCCCTGCTGCCCTCCCCCTCCTCTCC

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FIGURE 3223B

ACCATCGTCTTCTTGGCCATGGGAGGCCTTTCCCTAAGCCAGCTGCCCCAGAGCCACAGTTCCCCCTATGTGGAA
GTGGGGCGGGCTTCATAGAGACTTGGGAATGAGCTGAAGGTGAAACATTTCTCCCTGGATTTTACCAGTCTCA
CATGATTCCAGCCATCACCTTAGACCACCAAGCCTTGATTGGTGTGCGCAGTTGTCCTCCTTCCGGGGAAGGATT
TTGCAGTTCTTTGGCTGAAAGGAAGCTGTGCGTGTGTGTGTGTGTATGTGTGTGTGTGTATGTGTATCTCACACT
CATGCATTGTCCTCTTTTTATTTAGATTGGCAGTGTAGGGAGTTGTGGGTAGTGGGGAAGAGGGTTAGGAGGGTT
TCATTGTCTGTGAAGTGAGACCTTCCTTTTACTTTTCTTCTATTGCCTCTGAGAGCATCAGGCCTAGAGGCCTGA
CTGCCAAGCCATGGGTAGCCTGGGTGTAAACCTGGAGATGGTGGATGATCCCCACGCCACAGCCCTTTTGTCTC
TGCAAACCTGCCTTCTTCGGAAAGAAGAAGGTGGGAGGATGTGAATTGTTAGTTTCTGAGTTTTACCAAATAAAGT
AGAATATAAGAAG

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FIGURE 3224

GCCTGCAACGTGTCTCTG GGGCGGAGGCAGCGGCAGTGGAGTTGCTGCGCGCTGTTGGGGGCCACCTGTCTTT
CGCTTGTGTCCCTCTTTCTAGTGTGCGCTCGAGTCCCGACGGGCCGCTCCAAGCCTCGACATGTCGTACAAC
CGTGGTAACGGCCCAGAAGCCCACCGCCGTGAACGGCTGCGTGACCGGACACTTTACTTCGGCCGAAGACTTAA
CCTGTTGATTGCCAAAAACACGAGATTAGAGATCTATGTGGTCACCGCCGAGGGGCTTCGGCCCGTCAAAGAGGT
GGGCATGTATGGGAAGATTGCGGTCATGGAGCTTTTCAGGCCCAAGGGGGAGAGCAAGGACCTGCTGTTTATCTT
GACAGCGAAGTACAATGCCTGCATCCTGGAGTATAAACAGAGTGGCGAGAGCATTGACATCATTACGCGAGCCCA
TGGCAATGTCCAGGACCGCATTGGCCGCCCTCATAGACCGGCATTATTGGCATCATTGACCCTGAGTGCCGGAT
GATTGGCCTGCGTCTCTATGATGGCCTTTTCAAGGTTATTCCACTAGATCGCGATAATAAAGAACTCAAGGCCTT
CAACATCCGCCTGGAGGAGCTGCATGTCATTGATGTCAAGTTCCTATATGGTTGCCAAGCACCTACTATTTGCTT
TGTCTACCAGG

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FIGURE 3225

AGCAGCTCAGTGCAACGGTGTGAACTCAGCCTGTTTCAGAGCCTCCACACCATGACCTCCAAGAAGCTGGTGAAC
TCGGTGGCTGGCTGTGCTGATGACGCTCTTGCTGGCCTGGTGGCCTGCAACCCCAACCTGCAGCTCCTGCAGGGC
CACCGCGTGGCCCTCCGTTCTGACCTGGACAGCCTCAAGGGCCGGGTGGCACTGCTGTGCGGGTGGGGGCTCTGGC
CATGAGCCTGCCCATGCTGGTTTTATAGGGAAGGGGATGCTGACTGGGGTCATCGCGGGAGCTGTGTTTCACTCC
CCGGCAGTGGGCAGCATCCTGGCAGCCATCAGGGCCGTGGCCCAGGCCGGCACAGTGGGGACGCTCCTTATCGTG
AAGAACTACACTGGGGATCGGCTCAACTTCGGCCTGGCCCAGGAGCAGGCCCGGGCTGAAGGCATCCCGGTGGAG
ATGGTGGTGATTGGGGACGACAGCGCCTTCACTGTCTGAAGAAGGCAGGCCCGGGGGCTGTGCGGCACGGTG
CTTATACACAAGGTGGCAGGTGCTCTGGCTGAGGCTGGTGTGGGGCTGGAGGAGATCGCAAGCAGGTGAACGTG
GTCGCCAAGGCCATGGGTACCCTGGGGGTGAGCTTATCCTCCTGCAGCCTCCCTGGTTCCAAACCCACCTTCGAG
CTCTCAGCCGACGAGGTGGAGCTGGGCCTGGGGATCCACGGGGAAGCTGGTGTGCGCCGGATAAAGATGGCAACC
GCCGATGAGATTGTGAACTCATGCTCGACCACATGACAAACACCACCAACGCGTCCCATGTGCCTGTGCAGCCC
GGCTCCTCAGTTGTGATGATGGTCAACAACCTGGGTGGCCTGTCTTCTGAACTGGGCATCATAGCCGACGCT
ACCGTCCGCTCCCTGGAGGGCCGCGGGGTGAAGATTGCCCGTGGCCTGGTGGGCACCTTCATGTCAGCACTGGAG
ATGCCTGGCATTCTCTCACCTCCTGCTGGTGGATGAGCCTCTCCTGAACTGATAGATGCTGAAACCACTGCA
GCAGCCTGGCCTAACGTGGCTGCAGTCTCATTACTGGGCGGAAGCGGAGCCGGGTAGCCCTGCCGAGCCCCAG
GAGGCCCTGATTCCACTGCTGCAGGAGGCTCAGCCTCGAAGCGGATGGCGCTGGTGTGGAACGGGTGTGCAGC
ACTCTCCTGGGCCTGGAGGAACACCTGAATGCCCTGGACCGGGCTGCTGGTGACGGCGACTGTGGCACCACCCAC
AGCCGTGCGGCCAGAGCAATCCAGGAGTGGCTGAAGGAGGGCCACCCCTGCCAGCCCTGCCAGCTGCTCTCC
AAGTTGTCTGTCTGCTCCTGGAGAAGATGGGAGGCTCATCTGGGGCGCTCTATGGCTGTTCTGACTGCGGCT
GCACAGCCCCTGAAGGCCAAGACCAGCCTCCAGCCTGGTCTGCTGCCATGGATGCCGGCCTGGAAGCCATGCAG
AAGTATGGCAAGGCTGCTCCAGGGGACAGGACTATGCTGGATTCTCTGTGGGCAGCGGGCAGGAGCTCCAAGCC
TGGAAGAGCCCAGGAGCTGATCTGTTACAAGTCTGACCAAAGCAGTCAAGAGTGCCGAAGCTGCAGCCGAGGCC
ACCAAGAATATGGAAGCTGGAGCCGGAAGAGCCAGTTATATCAGCTCAGCACGGCTGGAGCAGCCAGACCCCGG
GCGGTGGCAGCTGCTGCCATCCTCCGGGCCATCTTGAGGTCTTGCAAGCTAGGGTGTGTGACTGCCTCCCTTG
GCCTCAGCTCCTCTCACTGCTGTGCTGAGGTGGCCTTTGTCACTTCCTTCTGCCTTCCAACCTCACCTTCCCC
GGCCTGGCCCCATTGGCCCCACCTCTAAGTTGAGCAGGAATCCTCCACCAAGCTTCAGAACTACAGACAGCAC
CCAGAGTGAGCTGGAGTGGGTCCCCATGCCTCTCCAGCATGCCCTTTCCCTTTCAGGAGGGTGGAGTCCCTGGG
TCATGCCCTCCCTGCCAGCTCTGGGCTTCAGAGATAAGGCATTTTCCCTTGTGCAGCCTTTACCTGGCAATCCTA
ATTTGGTTTTAAGACTCCCTGTGAAATGCTTTCCGCACCTTAACCCAGTGAGCGTGAAAAAGAAAGTTAATAAA
CTATAATACATGGAAGCAAGAAAAA

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FIGURE 3226

MTSKKLVNSVAGCADDALAGLVACNPNLQLLQGHRVALRSDLSLKGRVALLSGGGSGHEPAHAGFIGKMLTGV
IAGAVFTSPA VGSILAAIRAVAQAGTVGTL L I V K N Y T G D R L N F G L A R E Q A R A E G I P V E M V V I G D D S A F T V L K K A G
R R G L C G T V L I H K V A G A L A E A G V G L E E I A K Q V N V V A K A M G T L G V S L S S C S V P G S K P T F E L S A D E V E L G L G I H G E A G
V R R I K M A T A D E I V K L M L D H M T N T T N A S H V P V Q P G S S V M M V N N L G G L S F L E L G I I A D A T V R S L E G R G V K I A R A L V
G T F M S A L E M P G I S L T L L L V D E P L L K L I D A E T T A A A W P N V A A V S I T G R K R S R V A P A E P Q E A P D S T A A G G S A S K R M A
L V L E R V C S T L L G L E E H L N A L D R A A G D G D C G T T H S R A A R A I Q E W L K E G P P P A S P A Q L L S K L S V L L L E K M G G S S G A L
Y G L F L T A A A Q P L K A K T S L P A W S A A M D A G L E A M Q K Y G K A A P G D R T M L D S L W A A G Q E L Q A W K S P G A D L L Q V L T K A V K
S A E A A A E A T K N M E A G A G R A S Y I S S A R L E Q P D P G A V A A A A I L R A I L E V L Q S

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FIGURE 3227

AGTCTGGCCGCCATGTTGGAGCTTTCGCTGTTTCGGGGCCCCGGCCTGCTCCGGGCCCTCCCAGCGTCGCCGCTAGC
TGACTTAGGGCTCCCGCCACACTGCGCACGGCCTTGCTGAGGGCCGGCTCGTAGTGGGAGGCTTCGCGTTCACC
TGAACATTTCCGCCTCCTCTGGATGGGGGATGAGAGGCGGGGCTGATGCATCGCAGCAGTCTTGGACCCTGACTT
CGGACTTGGAGAAGAAACGCCGAGGAGGAACGGGAGTTAGGGGGTTAGCAGCTTGGCGCGCTGGGAGCCGGCCAC
CCCTGGTCTCCGGACTTCACTTCCCAGGAGGCCTCGCGCGGACTGGAAGTGCTGCGAGCCTATAAGAAGGCGAG
GCGGCACCCGCCGCTCTGCTCTGGGGCGGCATTGCCAGCCGGCTGTAGGCATTACAGGCGAGTGTCTTCTGCATCT
CCTAGGAACCTCGGGAGCGGCAGCTCCGGCGCCTGGTAGCGAGAGGCGGGTTCCGGAGATCCCGGCCTCACTTCG
TCCCACTGTGGTTAGGGGTGAGTCTTCAAATGTTAAGTGATTGCTCAAGGTGCCCATTTCCGAGGAATTGGAG
CCCAGGCCAGTTCTCTGAGCCTATCATTAGGGCTAAAGGAGTGCGTGATCAGAATGGTGTCTGGACGGTTCTACT
TGTCTGCTGCTGCTGGGGTCCCTGGGCTCTATGTGCATCCCTTCACTATCTACTGGATGCAGTACTGGCGTG
GTGGCTTTGCCTGGAATGGCAGCATCTACATGTTCAACTGGCACCCAGTGCTTATGGTTGCTGGCATGGTGGTAT
TCTATGGAGGTGCGTCACTGGTGTACCGCTGCCCCAGTCGTGGGTGGGGCCCAAACCTGCCCTGGAACTCCTCC
ATGCAGCGCTGCACCTGATGGCCTTCGTCTCTCACTGTTGTGGGGCTGGTTGCTGTCTTTACGTTTCACAACCATG
GAAGGACTGCCAACCTCTACTCCCTTCACAGCTGGCTGGGCATCACCAGTGTCTTCCCTCTTCGCCTGCCAGTGGT
TCCTGGGCTTTGCTGTCTTCCCTCCGCGCTGGGCTCCATGTGGCTGCGCAGCCTCCTAAAACCTATCCACGTCT
TTTTTGGAGCCGCCATCCCTCTCTGTCCATCGCATCCGTCATTTCCGGGCATTAATGAGAAGCTTTTTCTTCACTT
TGAAAAACACCACCAGGCCATACCACAGCCTGCCAGTGAGGCGGTCTTTGCCAACAGCACCGGGATGCTGGTGG
TGGCCTTTGGGCTGCTGGTGTCTACATCCTTCTGGCTTCATCTTGGAAAGCGCCCAGAGCCGGGGATCCTGACCG
ACAGACAGCTGCTGCTACAGCTGAGGCCTGGATCCCGGCCTTTCCCTGTGACTTACGTGTCTGTACCGGCAGGC
AGCCCTACAAATCCTGGTGACCTGCTCTCCCAAGAACAGAGCCTGTCCCCAGATGTCCCAGTAGCGATGAGTAAC
AGAGGTGGCTGTGGACTTCTCTACTTCTCCTTGCTGGATCAGGGCCTTCTGCTCCCGCTGGGCAGGTCTGGC
CTTGCTCTCTTGGCAGGGCCCCAGCCCCCTTGACCACTCTGCAGCTCACCATGCAGCTGATGCCAAAGTTGTGGT
GTCCAGTGTGCAGCAGCCCTGGGAGCCACTGCCACCTTCAGAGGGGTTCTTGCTGAGACCCACATTGCTTCACC
TGGCCCCACCATGGCTGCTTGCTGGCCCAACCTAGCGTTCTGTGCCATGCTAGAGCTTGAGCTGTTGCTCTTCT
TCAGGGGAGGAAATAGGGTGG

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FIGURE 3228A

AAAGGGCCAGAGGTAGACATTGAAGGTCCTGAAGGGAAGCTCAAAGGTCCCAAGTTTAAAGATGCCTGATGTACAT
TTCAAAGCCCAAAATCTCCATGAGTGACATTGATTTGAATTTGAAAGGACCTAAGATAAAAGGAGATATGGAC
ATTTCCGTTTCTAAACTGGAGGGAGATCTGAAAGGTCCCAAAGTGGATGTCAAAGGCCCTAAAGTGGGCATTGAC
ACTCCTGATATTGACATTCATGGTCCAGAAGGGAACTGAAGGGCCCCAAATTTAAAATGCCTGACTTACACCTC
AAGGCACCGAAGATCTCTATGCCTGAAGTTGACCTGAATCTGAAAGGTCCAAAGGTGAAGGGCGACATGGACATT
TCTCTGCCAAAGTGAAGGGGACCTCAAGGGCCCCGAAGTTGACATCAGGGACCCCAAGTGGACATTGATGTG
CCAGATGTGGACGTTCAAGGCCAGACTGGCACCTAAAAATGCCCAAAGTGAAAATGCCCAAGTTCAGCATGCCT
GGCTTCAAAGGAGAGGGGCCAGATGTGGATGTGAACCTGCCAAGGCTGACATTGATGTCTCAGGACCCAAAGTG
GACGTTGATGTTCCCTGATGTGAATATCGAAGGTCCAGATGCGAAACTAAAGGGCCCCAAGTTCAAGATGCCTGAG
ATGAGCATCAAAGCCCCCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAGGGCGAT
GTGGATGTTACCCCTTCTAAAGTGAAGGTGACCTCAAGGGCCCCAGAAGCTGACATCAAGGGCCCCAAAGTGGAC
ATCAACACCCCTGATGTGGATGTTTATGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAATTC
AGCATGCCTGGCTTCAAAGGAGAAGGTCCAGATGTGGATGTGAGCCTGCCCAAGGCCGACATCGATGTCTCGGGA
CCCAAGGTGGACGTTGATATTCCAGATGTGAATATCGAAGGTCCAGACGCAAACTGAAGGGCCCCAAGTTCAAG
ATGCCTGAAATAAATATCAAAGCTCCCAAGATCTCCATACCTGATGTTGACCTGGATTTGAAAGGACCCAAAGTA
AAAGGAGATTTTGATGTGTCTGTCCCTAAGGTTGAAGGGACTTTGAAAGGCCCAGAAGTAGATCTTAAAGGTCCA
CGTCTGGATTTGCAAGGCCCTGATGCCAACTCAGTGGCCCATCTTTGAAGATGCCATCGCTGGAGATATCTGCT
CCTAAAGTAAGTCTCTGATGTTGATTTGCATCTCAAGGCACCAAAAATTGGATTTTCAAGTCCGAAGTTAGAA
GGTGGTGAAGTGGACCTCAAGGGACCCAAAGTTGAAGCTCCAAGCTTAGATGTACACATGGACAGCCAGATATT
AACATCGAAGGGCCAGATGTTAAAATCCCCAAATTTAAGAAACCAAGTTTGGATTTGGGGCAAAAAGCCCCAAA
GCTGACATCAAGTCACCTTCACTGGATGTCACTGTTCTGAGGCAGAGCTGAACCTTGAGACTCCTGAAATTAGT
GTTGGTGGCAAGGGCAAGAAAAGTAAGTTTAAAATGCCTAAAATTCATATGAGTGGTCTAAGATTAAGGCCAAA
AAACAGGGATTTGACCTGAATGTTCCCTGGGGGTGAAATTGATGCCAGCCTCAAGGCTCCGGATGTAGATGTCAAC
ATCGCAGGGCCGGATGCTGCACTCAAAGTCGACGTGAAATCGCCCCAAACCAAGAAAACGATGTTTGGAAAAATG
TACTTCCCAGATGTAGAGTTTGACATTAAATCACCTAAATTTAAAGCTGAGGGCCCCCTCTCCCTAGCCCCAACTG
GAGGGTGAAGTCCAGGCACCTGATCTGGAACCTTCTTTGCCAGCGATTACGTCGAAGGTCTTGACATCAAGGCG
AAGGCTCCCAAGGTCAAGATGCCAGATGTGGACATCTCAGTGCCAAAAATAGAGGGTGACCTGAAAGGGCCCCAAA
GTGCAGGCAAACTTGGGTGCACCTGACATCAACATCGAAGGCCTAGATGCTAAAGTCAAACACCGTCTTTCGGC
ATTTCTGCCCTCAAGTCTCCATCCCTGATGTGAATGTAACTTTGAAAGGACCAAGATAAAGGGTGATGTCCCC
AGCGTGGGACTGGAAGGACCAGATGTAGATCTGCAAGGTCCAGAAGCAAAAATTAAGTTCCCAAGTTTTCCATG
CCCAAGATCGGCATCCAGGTGTGAAAATGGAGGGTGGGGGAGCCGAGGTCCATGCCAGCTACCCTCTCTTGAA
GGAGACTTGAGAGGACCAGATGTTAAGCTCGAAGGGCCCCGATGTTTCTCTAAAGGGGCCAGGAGTAGACTTGCCT
TCAGTGAACCTCTCTATGCCAAAAGTCTCTGGGCCTGACCTTGATCTGAACCTTGAAGGACCAAGTTTGAAGGGA
GACCTGGATGCATCTGTTCCAGCATGAAGGTGCATGCTCCAGGGCTCAACCTCAGTGGTGTGGTGGCAAAATG
CAGGTGGGAGGAGACGGTGTGAAAGTGCCAGGGATCGATGCCACAACAAAGCTTAACGTTGGGGCACCAGATGTG
ACACTGAGGGGACCAAGCCTGCAGGGAGATCTGGCTGTCTCTGGTGACATCAAATGCCCTAAAGTATCCGTAGGA
GCTCCTGATCTAAGCTTGGAGGCATCCGAAGGCAGCATTAACTTCCCAAAATGAAGCTGCCCAATTTGGCATC
TCTACTCCGGGGTCCGACTTGCACGTCAATGCCAAGGGGCCACAGGTTTCTGGCGAAGTGAAGGGGCCAGGTGTG
GATGTGAACCTGAAAGGGCCTCGGATTTCAAGCACCGAATGTGGACTTTAACTTGAAGGACCAAAAGTGAAAGGG
AGCCTTGGGGCCACTGGTGAGATCAAAGGCCCCACTGTGCGAGGAGGTCTTCCAGGCATTGGTGTTCAAGGCCTA
GAAGGAAACCTCCAGATGCCTGGAATTAAGTCTCTGGATGTGATGTGAACCTGCCAGGCGTGAATGTGAACTC
CCAACTGGGCAGATTTCTGGGCCTGAAATCAAAGGTGGTCTGAAAGGTTTCAAGTAGGTTTCCATGGGGCTGCT
CCTGATATCAGTGTGAAGGGGCCCTGCCTTTAATATGGCATCTCCTGAGTCAGATTTTGGCATCAACTTGAAGGGC
CCAAAAATCAAAGGAGGTGCGGATGTTTCAAGGGGTGTGAGTGCCCCAGACATCAGCCTTGGTGAAGGGCATTG
AGTGTTAAAGGTTCCGGGGGTGAGTGAAGGGACCCCAAGTCTCCTCTGCTCTCAACTTGGACACATCTAAGTTT
GCTGGGGGCCTTCATTTCTCAGGACCAAGGTGGAAGGAGGTGTGAAAGGAGGTGAGATTGGACTCCAGGCTCCT
GGGCTGAGTGTGTCTGGGCCTCAAGGTCACTTGGAAAGTGGATCTGGAAGTAACATTCCCTAAAAATGAAGATC
CCCAAATTTACCTTCTCTGGCCGTGAGCTGGTTGGCAGAGAAATGGGGGTGGATGTTCACTTCCCTAAAGCAGAG

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FIGURE 3228B

GCCAGCATCCAAGCTGGTGCTGGAGACGGCGAGTGGGAAGAGTCTGAAGTCAAACCTGAAAAAGTCCAAGATCAAA
ATGCCCAAGTTTAATTTTTCCAAACCTAAAGGGAAAGGTGGTGTCACTGGCTCACCAGAAGCATCAATTTCTGGG
TCCAAAGGTGACCTGAAAAGTTCAAAGGCCAGCCTGGGCTCTCTGGAAGGAGAGGCAGAGGCCGAAGCCTCTTCA
CCGAAAGGCAAATTCTCCTTATTTAAAAGTAAGAAGCCACGGCACCGCTCAAATTCATTTCAGTGATGAAAGAGAG
TTCTCTGGACCTTCCACCCCGACGGGGACGCTGGAGTTTGAAGGTGGGGAAGTGTCTCTGGAAGGTGGGAAAGTT
AAAGGGAAACACGGGAAGCTGAAATTCGGTACCTTTGGTGGATTGGGGTCAAAGAGCAAAGGTCATTATGAGGTG
ACTGGGAGCGATGATGAGACAGGCAAGTTACAGGGGAGTGGGGTGTCCCTGGCCTCTAAGAAGTCCCGACTGTCC
TCCTCTTCTAGCAATGACAGTGGGAATAAGGTTGGCATCCAGCTTCCCGAGGTGGAGCTGTCAAGTTCCACAAAG
AAAGAGTAGCAGGCCTTTGTATGTGTGTACATATATATATATAACAAAACATCAGCCTTGGGTGGTGTGTCC
TATATAAACTCCAAGGGAAACACACCGACTGCCTCAGCAATCATGCAAAGACCTTGCTGGCCCGGTGGCAAGC
GCTGAAAAACCGACCGCCTGTAGGCTCCTGGAACATACAGATAGGTAAAGAGTTCCAAGTTCGTCC

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FIGURE 3229

MPKVMPKFSMPGFKGEGPDVDVNLPKADIDVSGPKVDVDVDPVNIIEGPDADKLKGPVKFMPKEMSIKAPKISMPDI
DLNLKGPVKGDVDVTLPKVEGDLKGPEADIKGPKVDINTPDVDVHGPDWHLKMPKVKMPKFSMPGFKGEGPDVD
VSLPKADIDVSGPKVDVDIPDVNIIEGPDADKLKGPVKFMPKEMSIKAPKISIPDVLDLKGPVKGDFDVSVPKVEG
TLKGPEVDLKGPRDLDFEGPDADKLKGPVKFMPKEMSIKAPKISIPDVLDLKGPVKGDFDVSVPKVEG
PSLDVHMDSPDINIEGPDVKIPKFKKPKFGFGAKSPKADIKSPSLDVTVPFAELNLETPEISVGGKGKKSFKMP
KIHMSGPKIKAKKQGFDLNVPGGGEIDASLKAPDVDVNIAGPDAAALKVDVKSPKTKKTMFGKMYFPDVEFDIKSPK
FKAEAPLPSPKLEGELQAPDLELSLPAIHVEGLDIKAKAPKVKMPDVDISVPKIEGDLKGPVKQANLGAPDINIE
GLDAKVKTSPFGISAPQVSIPDVNVNLKGPVKIKGDVPSVGLEGPDVDLQGPAAKIKFPKFSMPKIGIPGVKMEGG
GAEVHAQLPSLEGDLRGPDKLEGPVSLKGPVLDLPSVNLSPKVSGLDLDNLKGPVKGLDASVPSMKVHA
PGLNLSGVGGKMQVGGDGVKVPIDATTKLVNAGPDVTLRGPVSLQGLAVSGDIKCPKVSGLDASVPSMKVHA
KLPKMKLPQFGISTPGSDLVNAGKGPQVSGELKGPVVDVNLKGPVRIAPNVDFNLEGPKVKGLGATGEIKGPTV
GGGLPGIGVQGLEGNLQMPGIKSSGCDVNLPGVNVKLPTGQISGPEIKGGLKGEVGFHGAAPDISVKGPVAFNMA
SPESDFGINLKGPVKIKGGADVSGGVSAPDISLGEGLSVKSGSGGEWKGPVSSALNLDTSKFAGGLHFSGPKVEG
GVKGGQIGLQAPGLSVSGPQGHLESGLSGKVTFFPKMKIPKFTFSGRELVGREMGVDVHFPKAEASIQAGAGDGEWE
ESEVKLKKSKIKMPKFNFSKPKGKGGVTGSPEASISGSKGDLKSSKASLSLEGEAEAEASSPKGKFSLFKSKKP
RHRSNSFSDEREFSGPSTPTGTLEFEGGEVSLEGGKVKGKHGKLFKFTFGGLGSKSKGHYEVTGSDDDETGLQGS
GVSLASKKSRLSSSSSNDSGNKVGIQLPEVELSVSTKKE

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FIGURE 3230

TCCGGAAGGAGGCGAACCCCTGAGGCGGGCCCCGCAAGCCTTCCCTGCGGGCCGGCAGAGCCCAACGACTAGTGGGA
CTCCGCGGGGGCGGGGGTAGCTGGAGCCTGGCTCTGGCTGGCAGGAGCCGAGCTTGTTCCGGAAGAAGCCGAGC
GGACGGGGGCCAGCCTCAGCGTCCCGGGAGTGAGGCGATAGCTGCGGCGGCGACAGCGCGGGCCGGGATGAACCG
CGACGGCTGAGGCAGCGGAGGTGCCGGCTGCGCGGGCCCCAGTGAGACTCCCTCGAAGCGGCAGCCCACCGTTTCG
GGGCTTTGCCTCGAGCCGAGCCCTGCCCCGCGAGCCTCCCGGACCCCTTTGTGCGGGCCGGAGGCGGCGCGGGA
ACGGCCATGSCGGCCAACATGTACCGGGTGGGAGATTACGTCTATTTTGAGAACTCTTCCAGCAATCCTTACCTG
GTTAGACGGATTGAGGAGCTCAACAAGACTGCAATGGAAATGTGGAGGCAAAGGTTGTCTGTCTTTTCCGGCGC
AGGGACATTTCTAGTAGCCTCAACAGCCTGGCTGATAGTAATGCCAGGGAGTTTGAAGAGGAATCAAAGCAGCCA
GGGGTGTCTGAGCAGCAGCGCCATCAACTGAAGCACCGGGAACTTTTCTTTCTCGGCAATTTGAATCATTACCA
GCCACCCACATACGGGGGAAATGCAGTGTGACCTCTTGAATGAGACAGATATCTTGAGCCAGTACCTGGAAAAG
GAGGACTGCTTTTTTACTCACTGGTGTGTTGACCCCGTGAGAAGACACTTCTCGCTGATCAGGGCGAGATTAGA
GTTGGTTGCAAATACCAAGCTGAGATCCCAGATCGCCTAGTAGAGGGAGAATCTGATAATCGGAACCAGCAGAAG
ATGGAGATGAAGGTCTGGGACCCAGACAACCCCTCTCACAGACCGGCAGATCGACCAGTTTCTTGTGGTGGCCCCGA
GCTGTGGGAACCTTTGCAAGAGCCCTAGATTGTAGCAGCTCCATTTCGGCAGCCAAGCTTGCACATGAGTGCAGCT
GCTGCCTCCCGAGATATCACTCTGTTCACGCCATGGATACCTTGCAAAGGAACGGCTACGACCTGGCTAAGGCC
ATGTCGACCTTGGTACCCCAAGGAGGCCCGGTGCTGTGTGCGGATGAGATGGAGGAATGGTCAGCCTCAGAGGCC
ATGCTATTTGAGGAGGCCCTAGAGAAGTATGGGAAGGACTTCAATGATATTCGCCAGGATTTTCTACCCTGGAAG
TCACTTGCCAGCATAGTCCAGTTTATTACATGTGGAAAACCAAGACCGGTATATTCAGCAGAAAAGGTTGAAA
GCTGCTGAAGCAGACAGCAAACCTGAAACAGGTCTACATTCCACCTACACTAAGCCAAACCCCTAACAGATCATT
TCTGTGGGTTCAAAAACCTGGCATGAATGGGGCTGGATTTTCAAGGGCCTGACTTGTGAGAGTTGCCACACCACA
CAGTCTGCTCAGTGGTATGCCTGGGGCCCCACCTAACATGCAGTGCCGCTCTGTGCTTCCTGTTGGATCTACTGG
AAGAAGTATGGGGGACTGAAGACCCCAACTCAGCTTGAGGGGGCCACTCGGGGCACCACGGAGCCACACTCAAGG
GGTCATTTATCCAGACCTGAAGCTCAAAGTCTCTCTCCTTACACAACCAGCGCCAACAGGGCCAAGCTACTGGCT
AAGAACAGACAAACTTTCTGCTTCAGACCACAAAGCTGACCCGTCTTGCCAGACGCATGTGCAGGGACCTATTA
CAGCCAAGGAGGGCCCGCCGACGGCCTTATGCTCCTATCAATGCCAATGCCATCAAAGCAGAGTGCTCCATTCTGA
CTTCTTAAGGCCGCCAAGACTCCATTGAAGATTACCCCTCTGGTGC GGCTGCCCTGGCAACTATCGTCAAAGAT
CTGGTGGCCAGGCACCCCTGAAACCAAAAACACCTCGGGGTACCAAGACACCGATCAACAGAAACCAGCTGTCC
CAGAACCGGGGACTGGGGGGCATTATGGTGAAACGGGCCTATGAGACTATGGCAGGGGCAGGGGTTCCCTTTCTCT
GCCAATGGAAGGCCTCTGGCTTCAGGGATTCTGTTCAAGCTCACAGCCAGCAGCCAAGCGTCAGAACTAAACCCA
GCTGATGCCCCCAATCCTGTGGTGTGTTGTGGCCACAAAGGATACCAGGGCCCTACGGAAGGCTCTGACCCATCTG
GAAATGCGGCGAGCTGCTCGCCGACCCAACTTGCCCTGAAGGTGAAGCCAACGCTGATTGCAGTGC GGCCCCCT
GTCCCTCTACCTGCACCCCTCACATCCTGCCAGCACCAATGAGCCTATTGTCTTGAGGACTGAGCACCTGTGGGG
AAGGGAGGTGGGCTGAGAGGTAGAGGGTGGATGCCAGGGCACCCAAACCTCCCTTCCCTTTCTGTGTCGAAGGGA
GTGAGGAGTGAATTAAGGAAGAGAGCAAGTGAGTGTGTGTCCTGGAGGGGTGGGGCGCCCTCTGGTGTATACCAC
CTCGAGACTTGTCTCATGCCTCCATGCTTGCCGATGGAGGACAGACTGCAGGAACCTTGCCCCATGTGGGAACCTA
GCCTGTTTTGGGGGGTAGGACCCACAGATGCTTGGACAGTTTTGGGGGGAGGGTTTTTAATTTTTTAAAGTT
TTGCCCTCCCTTTGTGAAAGGGGATGGGGAGGGGAAGAGTAAACAGATAACAGGTGGTGGTACCTGGTTGGGGGAG
GGGGGCGTGCACTGCCATGTCTTTTTTTTTTTTTTTTTTTTTTTTCTAATTGGGGGTTCTCTTTCTGTCC
GGTGTCGGGACTTTCCCTAATTGGAGTTTGAGGCCCTAAGCTGGCATCAACCCAGGCCACGCTCGCTCTTTCT
TCCCTCCCTCCCTCTGCCTTTTGTACGCCAGTTCTCAGAAATAAAGATCTTTGTCCGTTTTTTTAACTCG
GATTCTGTAATTGGTTCTTATAGTAACAAATAAAAGCTGTTTTCTTCAGCTTCTCCTGG

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FIGURE 3231

MAANMYRVGDYVYFENSSSNPYLVRRIEELNKTANGNVEAKVVCLFRRRDISSSLSNLSADSNAREFEEESKQPGV
SEQQRHQLKHRELFLSRQFESLPATHIRGKCSVTLLNETDILSQYLEKEDCFFYSLVFDVPVQKTLADQGEIRVG
CKYQAEIPDRLVEGESDNRNQQKMEMKVWDPDNPLTDRQIDQFLVVARAVGTFARALDCSSSIRQPSLHMSAAAA
SRDITLFHAMDTLQRNGYDLAKAMSTLVPQGGPVLCRDEMEEWSASEAMLFEEALEKYKDFNDIRQDFLPWKS
ASIVQFYMWKTTDRYIQKRLKAAEADSKLKQVYIPTYTKPNPNQII SVGSKPGMNGAGFQKGLTCECHTTQS
AQWYAWGPPNMQCRLCASCWYWKYGGGLKTPQTLEGATRGTTTPHSGHLSRPEAQSLSPYTTSANRAKLLAKN
RQTFLLQTTKLTRLARRMCRDLLQPRRAARRPYAPINANA IKAEC SIRLPKAAKTPPKIHLVRLPLATIVKDLV
AQAPLKPKTPRGTKTPINRNQLSQNRGLGGIMVKRAYETMAGAGVPFSANGRPLASGIRSSSQPAKRQKLN PAD
APNPVVFVATKDTRALRKALTHLEMRAARRPNLPLKVKPTLI AVRPPVPLPAPSH PASTNEPIVLED

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FIGURE 3232

GCAAACTCTGCACAAGATGCGGGCGGTAGCGGCAGTGGCGGCGCGTAGGAGGCGGTCTTGGGCGTCTTTGGTACT
GGCTTTTTTAGGGGTCTGCCTGGGGATTACCTTTGCTGTGGATAGAAGCAACTTTAAGACCTGTGAAGAGAGTTC
TTTCTGCAAGCGACAGAGAAGCATACGCCAGGCCTCTCTCCATACCGAGCCTTGCTGGACTCTCTACAGCTTGG
TCCTGATTCCCTCACGGTCCATCTGATCCATGAGGTCACCAAGGTGTTGCTGGTGCTAGAGCTTCAGGGGCTTCA
AAAGAACATGACTCGGTTTCAGGATTGATGAGCTGGAGCCTCGGCGACCCCCGATACCGTGTACAGATGTTTGGT
GGCTGATCCACCAATAGCCCGGCTTTCTGTCTCTGGTCGTGATGAGAACAGTGTGGAGTTAACCATGGCTGAGGG
ACCTTACAAGATCATCTTGACAGCACGCCATTCCGCCCTTGACCTACTAGAGGACCGAAGTCTTTTGCTTAGTGT
CAATGCCCCGAGGACTCTTGGAGTTTGAGCATCAGAGGGCCCCCTAGGGTCTCTTTCTCGGATAAGGTTAATCTCAC
GCTTGGTAGCATATGGGATAAGATCAAGAACCTTTTCTCTAGGCAAGGATCAAAAGACCCAGCTGAGGGCGATGG
GGCCCAGCCTGAGGAAACACCCAGGGATGGCGACAAGCCAGAGGAGACTCAGGGGAAGGCAGAGAAAGATGAGCC
AGGAGCCTGGGAGGAGACATTCAAACTCACTCTGACAGCAAGCCGATAGCCCCATGTCTGTGGGTTTGGACTT
CTCTCTGCCAGGCATGGAGCATGTCTATGGGATCCCTGAGCATGCAGACAACCTGAGGCTGAAGGTCACTGAGGG
TGGGGAGCCATATCGCCTCTACAATTTGGATGTGTTCCAGTATGAGCTGTACAACCCAATGGCCTTGTATGGGTC
TGTGCCTGTGCTCCTGGCACACAACCTCATCGCGACTTGGGCATCTTCTGGCTCAATGCTGCAGAGACCTGGGT
TGATATATCTTCCAACACTGCCGGAAGACCTGTTTGGGAAGATGATGGACTACCTGCAGGGCTCTGGGGAGAC
CCCACAGACAGATGTTGCTGGATGTGAGAGCTGGCATCATTGACGTCTTCTGCTGCTGGGGCCCTCCATCTC
TGATGTTTTCCGGCAATATGCTAGTCTCACAGGAACCCAGGCGTTGCCCCACTCTTCTCCCTCGGCTACCACCA
GAGCCGTTGGAATACCGGGACGAGGCTGATGTGCTGGAAGTGGATCAGGGCTTTGATGATCACAACCTGCCCTG
TGATGTCTCTGGCTAGACATTGAACATGCTGATGGCAAGCGGTATTTACCTGGGACCCAGTCGCTTCCCTCA
GCCCCGCACCATGCTTGAGCGCTTGGCTTCTAAGAGGCGGAAGCTGGTGGCCATCGTAGACCCCAACATCAAGGT
GGACTCCGGCTACCGAGTTCACGAGGAGCTGCGGAACCTGGGGCTGTATGTTAAACCCGGGATGGCTCTGACTA
TGAGGGCTGGTGCTGGCCAGGCTCAGCTGGTTACCTGACTTCACTAATCCCACGATGAGGGCTGGTGGGCTAA
CATGTTACAGCTATGACAATTATGAGGGCTCAGCTCCCAACCTCTTTGTCTGGAATGACATGAACGAACCATCTGT
GTTCAATGGTCTGAGGTACCATGCTCAAGGATGCCAGCATTATGGGGGCTGGGAGCACCGGGATGTGCATAA
CATCTATGGCCTTTATGTGCACATGGCGACTGCTGATGGGCTGAGACAGCGCTCTGGGGGCATGGAACGCCCTT
TGTCTGGCCAGGGCCTTCTTCGCTGGCTCCCAGCGCTTTGGAGCCGTGTGGACAGGGGACAACACTGCCGAGTG
GGACATTTGAAGATCTCTATTCCATGTGTCTCAGCTTGGGGCTGGTGGGACTTTCCTTCTGTGGGGCGGATGT
GGGTGGCTTCTTCAAAAACCCAGAGCCAGAGCTGCTTGTGCGCTGGTACCAGATGGGTGCTTACCAGCCATTCTT
CCGGGCACATGCCACTTGGACACTGGGCGACGAGGCCATGGCTGTTACCATCTCAGCACAAATGATATAATCCG
AGATGCCCTTGGGCCAGCGATATTCTTTGCTGCCCTTCTGGTACACCCCTCTTATATCAGGCCCATCGGGAAGGCAT
TCCTGTCTATGAGACCCCTGTGGGTGCAGTACCCTCAGGATGTGACTACCTTCAATATAGATGATCAGTACTTGCT
TGGGGATGCGTTGCTGGTTACCCCTGTATCAGACTCTGGAGCCCATGGTGTCCAGGTCTATCTGCCTGGCCAAGG
GGAGGTGTGGTATGACATTCAAAGCTACCAGAAGCATCATGGTCCCCAGACCCTGTACCTGCCTGTAACCTCTAAG
CAGTATCCCTGTGTTCCAGCGTGGAGGGACAATCGTGCTCGATGGATGCGAGTGCGGCGGTCTTCAGAATGTAT
GAAGGATGACCCCATCACTCTCTTTGTGCACTTAGCCCTCAGGGTACAGCTCAAGGAGAGCTCTTTCTGGATGA
TGGGCACACGTTCAACTATCAGACTCGCCAAGAGTTCCTGCTGCGTCGATTCTCATTCTCTGGCAACACCCTTGT
CTCCAGCTCAGCAGACCCTGAAGGACACTTTGAGACACCAATCTGGATTGAGCGGGTGGTGATAATAGGGGCTGG
AAAGCCAGCAGCTGTGGTACTCCAGACAAAAGGATCTCCAGAAAAGCCGCTGTCTTCCAGCATGACCCTGAGAC
CTCTGTGTTGGTCTGCGCAAGCCTGGCATCAATGTGGCATCTGATTGGAGTATTACCTGCGATAA

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FIGURE 3233

MAVAVAARRRRSWASLVLAFLGVCLGITLAVDRSNFKTCEESSFCKRQRSIRPGLSPYRALLDSLQLGPDSLT
VHLIHEVTKVLLVLELQGLQKNMTRFRIDELEPRRPYRVDPVLVADPP IARLSVSGRDENSVELTMAEGPYKII
LTARPFRDLLEDRLSLLSVNARGLLEFEHQRAPRVSFSDKVNLTGSIWDKIKNLF SRQGSKDPAEGDGAQPEE
TPRDGDKPEETQGKAEKDEPGAWREETFKTHSDSKPYGPM SVGLDFSLPGMEHVYGIPEHADNLR LKVTEGGEPYR
LYNLDVFQYELYNPMALYGSVPVLLAHNPHRDLGIFWLNAETWVDISSNTAGKTLFGKMMDY LQGSGETPQTDV
RWMSETGIIDVFLLLGPSISDVFRQYASLTGTQALPPLFSLGYHQS RWNRYRDEADVLEVDQGFDDHNLPCDVIWL
DIEHADGKRYFTWDPSRFPQPRMTLERLASKRRKLVAIVDPHIKVDSGYRVHEELRN LGLYVKTRDGS DYEGWCW
PGSAGYPDFTNPTMRAWWANMF SYDNYEGSAPNLFVWNDMNEPSVFNGPEVTMLKDAQHYGGWEHRDVHNIYGLY
VHMATADGLQRSGGMERPFV LARAFFAGSQRF GAVWTGDNTAEWDHLKISIPMCLSLGLVGLSFCGADVGGFFK
NPEPELLVRWYQM GAYQPF FRAHAHLDTGRREPWLLPSQHNDIIRDALGQRY SLLPFWYTL LYQAHREGIPVMRP
LWVQYPQDVTTFNIDDQYLLGDALLVHPVSDSGAHGVQVYLP GQGEVWYDIQSYQKHG PQTL YLPVTLSSIPVF
QRGGTIVPRWMRVRSSECMKDDPITL FVALSPQGT AQGELFLDDGHTFNYQTRQEFLLRRFSFSGNTLVSSSAD
PEGHFETPIWIERVVIIGAGKPAAVVLQTKGSPESRSLSFQHDPETSVLVLRKPGINVASDWSIHLR

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FIGURE 3234

CGCCGCTCGCGCCTCGGGCTCGGCTCGGGCTCCGGGATGTCCGCGCTGTGCGACCTCCCGGGGCCCCAGGGCCA
CCTGGGCTGCCCCGGCCACCCACGGTCCCGCGCCTCTCAGTGCTCAGGAGCTGTCCAGGAAATCAAGGCTTTT
CTGACTGGCGTAGACCCCATTTCTGGGCCACCAACTCTCAGCCCCGGAACATGCTCGCTGTGGTCTTCTCCTGCTC
CGTTCTTTTGCCACCTGCTCGGGCTGCTGTGCTTGACCACTTGAGAGGTGTCTTTGATGAGAGTGTCCGGGCCCCAC
CTGGCTGCCCTGGATGAAACCCCTGTGGCTGGTCCACCTCACCTCCGTCCACCTCCACCCTCTCATGTCCCTGCT
GGTGGACCTGGTCTAGAGGATGTGGTTCAGGAAGTGCAGCAGGTGCTGTCTGAGTTTATCCGGGCCAACCCAAAG
GCCTGGGCACCTGTGATTAGTGCATGGTCCATTGACCTCATGGGGCAACTGAGCAGCACGTACTCAGGCCAGCAC
CAGCGTGTTCACCGCTACTGGCGCTCTTAATGAACTGCTACAGCTGTGGATGGGTTGTAGGGCCACGCGTACA
TTAATGGACATCTATGTGCAGTGCCTCTCGGCTCTCATTGGTAGCTGCCAGATGCGTGTGTGGATGCCTTGCTG
GATACCTCTGTTTCAGCATTCTCCACACTTTGACTGGGTTGTGGCACATATTGGCTCCTCTTTTCTTGGCACCATC
ATTTCCCGGGTTCTCTCCTGTGGCCTTAAGGACTTTTGTGTCCATGGTGGGGCTGGAGGTGGAGCTGGCAGTAGT
GGTGGAAAGCTCTTCTCAGACCCCTCTACAGACCCCTTCCCTGGATCTCCTGCCATTCTCGCGAGAAACGGGTG
CCCAAGATTGCCTCAGTTGTAGGCATCCTAGGTACCTGGCCTCCCGCCACGGAGATAGCATCCGACGGGAGCTC
CTGCGAATGTTCCATGATAGCCTGGCAGGGGGATCTGGAGGCCGAGTGGGGACCCCTCCCTTCAGGCCACGGTT
CCGTTCTACTGCAGCTGGCAGTCATGTACCAGCTTTGCTGGGCACTGTCTCTGGAGAGCTTGTGGATTGCCTC
AAGCCCCCAGCTGTGCTGAGCCAGCTGCAGCAACACCTTCAAGGATTCCCCGAGAGGAGCTGGACAACATGTTG
AACCTGGCTGTGCACCTGGTGGCCAGGCCTCTGGGGCAGGTGCCTACCCTTGTCTGCAGTTTCTGGTGGACACA
GCTATGCCTGCTTCGGTCAATTACCACCCAGGGCCTGGCTGTGCCAGACACCGTGCCTGAGGCTTGTGACCGGCTA
ATCCAGCTGCTGCTGCTGCACCTGCAAAACTGGTTCATCACCGGGGAGGGTCTCCTGGGGAAGGGGTGCTAGGC
CCGCCCCCACCTCCCCGCTTGGTGCCTTTTTAGATGCGCTCAAAAACCATGTTGGAGAGCTGTGTGGAGAGACG
TTACGATTGGAACGGAAGCGCTTCTCTGGCAGCACCACTCTTGGGCTGCTGTCTGTCTATACCCGGCCTAGC
TGTGGACCTGAGGCCTTGGGCCATCTGCTGAGCCGAGCCCGAAGCCCTGAAGAGTTGAGTTTGGCCACCCAGTTA
TATGCAGGGCTAGTGGTCAGCCTCTCTGGCCTCCTGCCCTTGGCTTTCCGAAGCTGTCTGGCTCGGGTGCATGCA
GGGACATTACAGCCTCCCTTCACGGCCCGGTTTCTGCGCAACTTGGCACTGCTAGTAGGGTGGGAACAGCAGGGT
GGCGAGGGCCCTGCAGCCCTAGGGGCGCACTTTGGGGAATCTGCCTCAGCCCATCTGTCTGACCTGGCTCCTCTC
CTGCTACATCCTGAGGAGGAAGTAGCTGAAGCTGCTGCCCTCTCTCCTGGCCATTTGTCCCTTTCTTCTGAAGCC
TTATCCCCCTCCCAGCTCCTGGGACTGGTAAGGGCTGGGGTGCACCGCTTCTTTGCCTCTCTGAGGCTGCATGGA
CCCCCAGGTGTGGCCTCAGCCTGTCAGCTTCTACCCGCCTGTCTCAGACATCCCCAGCTGGGCTCAAGGCTGTC
CTGCAGCTGCTGGTGAAGGAGCCTTACATCGAGGCAACACAGAACTGTTTGGTGGGCAAGTAGATGGGGACAAT
GAGACTCTCTCAGTTGTTTCAGCTTCTTTGGCTTCTGCCTCCCTGTTGGACACTAACCGGAGGCACACTGCAGCT
GTGCCAGGTCTTGAGGGGATTTGGTCACTTTTCATGCTGGAGTCATCGGCCGTGGCTTAAAGCCACCCAAGTTT
GTCCAGTCACGAAATCAGCAGGAAGTGATCTATAACACCCAGAGCCTCCTCAGCCTCCTGGTTCACTGCTGCAGT
GCCCCAGGGGGCACTGAATGTGGGGAATGCTGGGGGGCACCCATCTTGAGTCCAGAGGCAGCCAAAGCAGTGGCA
GTGACCTTGGTGGAGAGTGTGTGTCCCGATGCAGCTGGTGCAGAGCTGGCCTGGCCCCCGAGGAACACGCCCGG
GCCACCGTGGAGCGGGATCTCCGATTGGCCGGCGCTTCCGCGAACAGCCCTGCTCTTTGAGCTGTTAAAGCTG
GTAGCAGCTGCACCCCAAGCCTGTGCTACTGTTCCGTGCTGCTTCGGGGGCTGCTGGCCGCCCTCTTGGGCCAT
TGGGAAGCCTCTCGCCACCCCTGACACGACCCACTCCCCCTGGCACCTGGAGGCATCCTGCACCTTAGTGGCTGTC
ATGGCTGAGGGAAGCCTCCTGCCCTCCGGCCCTGGGTAATATGCATGAAGTATTTAGCCAAGTGGCACCTTTCGAG
GTGCGTCTGCTGCTGCTCAGTGTCTGGGGTTTTCTCCGGGAGCATGGGCCCTTGCCTCAGAAGTTCATCTTCCAA
TCAGAGCGGGGTGCTTCATTTCGGGACTTCTCCAGGGAGGGTGGAGGTGAGGGTGGACCCCATCTGGCTGTGCTG
CACAGTGTCTCCACCGCAACATCGACCGCCTAGGTCTTTTCTCTGGCCGTTTCCAGGCACCTTACCCTCCACT
CTCCTTCGACAGGGGACGTAGCCTTTTCTTGTCTGGAAGCCCAGGGAGGTTGAGCAGTGAGAGAGGGAAGGGAC
TAACGTGCTCCGGAAGGGTGGAGGTTTCTCTTAAGTCCTTGGTCTAAAGAGCGCTGTCACTTTTTTCTCTCC
ACTTTTTTTTTTCTAAATAAAATTTGCCAACTTG

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FIGURE 3235

MSALCDPPGAPGPPGPAPATHGPAPLSAQELSQEIKAFITGVDPILGHQLSAREHARCGLLLLRSLPPARAAVLD
HLRGVFDESVAHLAALDETPVAGPPHLRPPPPSHVPAGGPGLEDVVQEVQVLSSEFIRANPKAWAPVISAWSID
LMGQLSSTYSGQHQRVPHATGALNELLQLWMGCRATRTLMDIYVQCLSAIGSCP DACVDALLDTSVQHS PHFDW
VVAHIGSSFPGTIIISRVLSCGLKDFCVHGGAGGGAGSSGGSSSQTPSTDFPGSPAIPA EKRVPKIASVVGILGH
LASRHGDSIRRELLRMFHDSL AGGSGGRSGDPSLQATVPFLLQLAVMSPALLGTVSGELVDCLKPPAVLSQLQQH
LQGFPREELDNMLNLAVHLVSQASGAGAYRLLQFLVDTAMPASVITTOGLAVPDTVREACDRLIQLLLLHLQKLV
HHRGGSPGEGVLQPPPPRLVPFLDALKNHVGELCGETLRLEKRFLWQHQLLGLLSVYTRPSCGPEALGHLLSR
ARSPEELSLATQLYAGLVVSLSGLLPLAFRSC LARVHAGTLQPPFTARFLRN LALLVGWEQQGGEGPAALGAHFG
ESASAHLSDLAPLLLHP EEEVAEAAASLLAICFPFSEALSPS QLLGLVRAGVHRFFASLRLHGPPGVASACQLLT
RLSQTSPAGLKAVLQLLVEGALHRGNTELFGGQVDGNETLSVVSASLASASLLDTNRRHTAAVPGPGGIWSVFH
AGVIGRGLKPPKFVQSRNQEV IYNTQSLLSLLVHCCSAPGGTECGECWGAPILSPEAAKAVAVTLVESVCPDAA
GAELAWPPEEHARATVERDLRIGRRFREQPLLFELLKLVA AAPALCYCSVLLRGLLAALLGHWEASRHPDTTHS
PWHLEASCTLVAVMAEGSLLPPALGNMHEVFSQLAPFEVRLLLLSVWGFLREHGPLPQKFIQSERGRFIRDFSR
EGGGE GPHLAVLH SVLHRNIDRLGLFSGRFQAPSPSTLLRQGT

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FIGURE 3236

GAGGAACATGATTTTATTGGTTCTTTTCAGTTACCCACATCCGACTCGCGTCTCGGCCCTGGCCCGCCTTGCGGAC
CTTAAAGCAGTCAGTCCAGGGTTTGGGGGAAACGTGCTACCCGACGGCAGCTCACAGGACCCCGAGAGTCCTG
GCATGGTATCTCGGTCCGGACTCTCCGCTGGGCCACGAAGGAGAAAGGCTGCCTCGGATTCTGCGCCCAAGCC
AAGGTCCGGCGCCACGGAGGCAAGTCCGGTCTCACGGTGACCTCCCGCTGGCGCCGCTTCGCCGCCAACCATC
CAGTTCTTCTCCAGGCCACGTTCTCTGCGTGGTCTGCTCTCTGCAGAGTGGCCAGCAATAGCTGCTGGGTCT
CTGGCCGCTCTCTCCCTGCTCTTGGGTCTGTCAGTGGCATCTCTGAGGGCAGGAAGGGGAGTTTCGAGGAGCT
CCAGTCCGGGGCTCTCCACCCGCCACCCTTCTCGGGACTACCAGTTGCTTCTACCTTTAGCATTTCCTGCTTC
CGCCGCTCTCCCGGGGTACGATAACGAGGAGCGCGTAGCCACGCCAGCCCTGCGCCAGCATTGCGACTGAG
ATCAGCATTTCGCAAGGAATCCATGGCCGCTGCACAGCCAGCGGAGCGCCACGGGAGCTCCCCGAGCCGC
AAGCTGTTGCCGCGCGTCTCACTACCCCTTGGCGCAGGCTAGAGCGCCCTATAGCAGAAACCATAGATAAGCGG
CCGGCTAGAGAGGACCTGCTCGAGGAAACGTTTGAATCCGGAGCGCTTGGATCTCAGGTTTAGCTGAGGGGGTT
GAGGTGTCCAAGAGTGCTGGCACCAGGGCTGAGCGGGGACCTGTGTCTCAATTCCGGGGTGGGATTGCT
AGGGGGAGAGTGCGTGTCTTCATGGTTGCCGTGGGTTTTATGATTGCCATTTTTCTGTCTTCCGACGTTTCCCG
ATCAGTAGAGGCCGAGCTGTGCTCTGTGGTTCTCTGAGTCACCCGGAGTTTTCAACACAGCGCATGGAGGGC
ATCTACACACATACATCCCTCTCAATCCCTCAACTCTGGAACAAACACTCAAAGTCAAGTATACTGGTTGGA
GAAATGGGTAATAGTTACTTATCTTAAACATTTATTTTACAAACAACCTATTCCTTTTCTCGTTCATGGTACACAC
TTGGTATTGTTTTGGTTTTTTTTTGGTTTTGTTGTTGTTGTTAGTGTGTGGGCGTGGTTTTGTTTTGTTTTGGAG
ACAAGGTCTCGCTCTGTGCGCCAGGGCTGGAGTGCAGTGGCGCGATCATGGCTCACTGAAGCCTCGACTTCCAGG
GCCAAGCGATCCTCTGCTCAACCTCCCGGATAGCTGGGATTACAGGCGTGCAACCACCGCCCGCTGGTAT
TGCTTTTTGTTTTGCTTCTTTTTCTTTTTGCTTTTTGAGACAGAGTCTCACTCTGTTGCCAGCTGGAGTGCAG
TGGCGTGATCTCGGCTCACTGCAAGCTCTGCCCTCCCGGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGC
TGGGACTACAGGCGCCCGCCACCACGGCCGGCTAATTTTTGTATTTTTAGTAGAGAAAGAGTTTCACTATGTAG
GTCAGGCTGGTCTCGAACTCCTGACCTCGTGATCCGCCCAATCCGCCACCTCGGCCTCCCAAAGTGCTGGGATT
ACAGGTGTGAGCCACCGCGCCCGGCTGTTTTGCTTTGTTTTCAACCACTAAAAGGCTGGATTCTGTGTAACATACT
GAATTCGCTTTACAGAAGAAAACACCTCTTAGCTGTGTGACTGATTATAGGCAAGTTCTTGTGCCCCGGTTTTCT
GCATCAGAAAATGAAGCTTATAACAACAGTACTTGTCTACAGTTTTAGGATAATTAAATTAGTTATATGTAAAG
CAATTAACAGCTCCTGCCAAGAGTAAACACCATATAAATATTCAATAAATAACATACAAACATACCAGGTTG
GGAAAATCAGTAAGCATAGGAGTCAGGAAATCCAAAGTTGGTTATCACAACCTCTGGCCACAGGGCTTTAATC
CAGGTGCCCTTGCTCTCTACCTTGTTGCCATCCAGTGCTCCAGGGAGTAAGTAGAAATAAAGATCCTATCTC
ACCTCTTGGGCATTTCCCTTGCCCTGAAAGCGTATAATCGCTTAGCACAGTCCGGTGCTTAAGGGCCAGGCTCC
AAAGAAGATTAAAGGAACAGTTTGTGGGGTGCACTGGGCAGCAGTACTCTCCTCTGAGTTCAATCATCTTGCACT
CTAAGAATCACCACCATGGCCCTTGTTGCCAGGGAGAAAGCAAGGAGGATGGGCTTTGGACTAGAAATAGCCAGGC
TCCTCCAGCATCCAGAAAGTCCCAGGCTGCCAACCCCTCTCTGGGACAGAGGAAAAATTGGCAAGGTTGAAGGT
CACCAGCACATTCAGGATTTCTCTCAAAAGTCCCATCTGCCGTCTATTGTGGTGGAATCCAGTGAGGTGAATGAA
GAGAGTGGGATCTCCATTTGCCCATGAGGAGCTGCTGCTGCTCACTGATGGTGAGGAAGAGGATGCTGAGGCC
TTCTTCCAAGACCAAGTGAAGAGCCAGGCTGGGCTTGAGCCACAGGACCCTAGAAGTCTTTAAGAACATTT
AACGCTGGACTCAGCTGGGGGCAGGACCAGGATGAAGAAGATGCTTGTGGATTCTTGAGGACACAGCATGTCTG
GAAGCCACCAACCACTGTCCCTTCTGGGACTCAACAGGCTCCCGTGTTGTAGAAGTGGCTTTGTGGAATATTCC
CATCTCTGCTCCTAATAGCTTTGAGGGAGCTGAAGAAGAAGCTGTTCAAACGCCGGCGGGTGTGAATCGGGA
GCGGCGTCTGAGGCACCGGGTGGTGGGGCTGTGATAGCAAGGGCTGATCACGGCCGCCACCACCTCAAGAAGCG
GGCGTCCAGTGCAGTGCCAACTTACACTGTGAGGAAGAAGCGCAGAAACTCTCCAGCAGATCCGGCTTGC
CCAGAAAGAGAAGACAGCCATGGAAGTGAAGCCCTTCAAAGCCAGCCAGGACTAGTGAACCACAGCTCAAAAG
GCAAAAGAAGACAAAAGCCCCCAGGATGTAGAAATGAAGACCTTGAAGATGAGAGCTAAACCTCTTCCACTAG
AAGATTCTCAACTGGAGCCAGCCTTCAGACTCAGTGGTTGTTTCAGAGGACTTTGACAAAAGCAAGGCCCTTTT
CACTCTCAGATTTCTCTACCTAATGGCTACTGACCTCCCTAGAGGGATGTCTTTGGGAGGGAAGAAGGTA
CAGAAGAAAGATTGGAGAAGGGCCTCTTAGCAGTCAACTCCATTTGTAATAAAGCCCTAGCACTCTGAAAAAA
AAAAAAAAAAAA

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FIGURE 3237

MKKMLVGFLRTQHVWKPPTTVPSGTQQAPVFVEVALWNIPISCLLIALRELKKKLFKRRRVNLNRERRLRHRVGA
VIDQGLITRHHLLKKRASSARANITLSGKKRRKLLQQIRLAQKEKTAMEVEAPSKPARTSEPQLKRQKTKAPQDV
EMKDLEDES

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FIGURE 3238

GGCACGAGGGGCTGCTATAGAGCCGGGTGAGAGAGCGAGCGCCCGTCGGCGGGTGTCGAGGGCGGGTTGCCTCGC
GCTGACCCTTCCCGCCCTCCTTCTCGTCACACACCAGGTCCCCGCGGAAGCCGCGGTGTCGGCGCCATGGCGGAG
CTGACGGCTCTTGAGAGTCTCATCGAGATGGGCTTCCCAGGGGACGCGCGGAGAAGGCTCTGGCCCTCACAGGG
AACCAGGGCATCGAGGCTGCGATGGACTGGCTGATGGAGCACGAAGACGACCCCGATGTGGACGAGCCTTTAGAG
ACTCCCCTTGACATATCCTGGGACGGGAGCCCACTTCTCAGAGCAAGGCGGCCTTGAAGGATCTGGTTCTGCT
GCCGGAGAAGGCAAACCCGCTTTGAGTGAAGAGGAAAGACAGGAACAACTAAGAGGATGTGGAGCTGGTGGCC
CAGAAGCAGCGGGAGCGTGAAGAAAGAGAGGAACGGGAGGCATTGGAACGGGAACGGCAGCGCAGGAGACAAGGG
CAAGAGTTGTCAGCAGCACGACAGCGGCTACAGGAAGATGAGATGCGCCGGGCTGCTGAGGAGAGGCGGAGGGAA
AAGGCCGAGGAGTTAGCAGCCAGACAAAGAGTTAGAGAAAAGATCGAGAGGGACAAAGCAGAGAGAGCCAAGAAG
TATGGTGGCAGTGTGGGCTCTCAGCCACCCCACTGGCACCAGAGCCAGGTCTTCTCCCTCTTCTCCCAGCCAG
GAGCCTCCCACCAAGCGGGAGTATGACCAGTGTGCGATACAGGTCAGGCTGCCAGATGGGACCTCACTGACCCAG
ACGTTCCGGGCCCCGGGAACAGCTGGCAGCTGTGAGGCTCTATGTGGAGCTCCACCGTGGGGAGGAAGTAGGTGGG
GGCCAGGACCCTGTGCAATTGCTCAGTGGCTTCCCAGACGGGCTTCTCAGAAGCTGACATGGAGCGGCCTCTG
CAGGAGCTGGGTATGGCTGCAAGACTAGAAACCAGGACTAGAACTGGGGGAGTAGGGAGGCATGCCTAGGAAAA
GGAGGGATGCAAAGAGAAGGGGCTTTGTGAACATGGTGCAAGGCCAGGAATTTTGGGAGCAAAAACCAAGTATCC
TTGTGGTTCAAGCCTGTTTTCTTCCATCTTCAGGACTCGTGCTTCTGCTGTTCTCATTGTGGCCAAGAAATGTC
CCAGCTGAGGGCCTTTGTCCCATTTGTCCCTCTGTGACCCCTTCATCTTTGATAAAGCACTGACATCTCCTTCCTA
ATAAATAGACCCTGAGTTCTGTAAAAA

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FIGURE 3239

MAELTALESLEIEMGFPRGRAEKALALTGNQGIEAAMDWLMEHEDDPDVDEPLETPLGHILGREPTSSEQGGLEGS
GSAAGEGKPALSEEERQEOTKRMLELVAQKQREEREEREEREALERERQRRRQGQELSAARQRLQEDEMRRAAEER
RREKAEELAARQRVREKIERDKAERAKKYGGSVGSQPPPVAPEPGFVPSSPSQEPPTKREYDQCRIQVRLPDGTS
LTQTFRAREQLAAVRLYVELHRGEELGGGQDPVQLLSGFPRRAFSEADMERPLQELGMAARLETRTRNWGSREAC
LGKGGMQREGAL

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FIGURE 3240

GGCACGAGGCCTAAGAGTTCCTCTGCTGTACGACTGCACTCCCGCACCCCTCCCCTAAATCCCCCTCTTCGGCCT
GTTTACCTTTTAACTTGGCTTCGTTGCACGTTTGTGTGTGTGTGTTGCTCTTCGCAGCCTCTTGAGCGTCTTTT
GTACTTAATTCTTACACTGTGGACGCTCTCTCGCGCCCGCCATCCCCGACCCCTCTGATCTCCGATCCTTGACG
ATGTCTAGCCTGCATTGATTGGCCCTTTTCCCTGGGTATGGCAGATCTATTGCTTGATGATCCCTCTCCCCCAAG
AATTCTAACACAGGAGCTGTCCTGAGGCTCTGGATGACTTTATTCTTCAAATGGCTTTACCCCTCCAGTAGCTCC
AGGGACCCTCCATTTTCCATATCCAGGAAAATGTGATGCGCCACAGGTATCAGCGTCTGGATCGCCACTTCACGT
TTTAGCCACAAGTGACTCAGTGGAAGATCCAGAGTCAACAGAGGCTCGTCAGGAAGATGCTCTACAGAAAAGGTAG
ACCAAAAGGAGGAAGCTGGGGAAAAAGAGGTGTGCGGAGACCAGATCAAAGGACCGGACAAAGAGGAGGAACAC
CAGCTGCTGCATCCCATGGCCAGGGGTGGCGTCCAGGTGGCAGAGCAGCTAGGAACGCAAGGCCCTGAACCTGGGG
CCAGACACCCTGCTCTCCCGGCCATGGTCAACGACCCTCCAGTACCTGCCTTACTGTGGGCCCAGGAGGTGGGCC
AAGTCTTGCCAGGCCGTGCCCCGAGGCTGCTGCTGCAGTTTGGGGTGCTCTTCTGCACCATCCTCCTTTTGCTCT
GGGTGTCTGTCTTCTCTATGGCTCCTTCTACTATTCTATATGCCGACAGTCAGCCACCTCAGCCCTGTGCATT
TCTACTACAGGACCGACTGTGATTCCCTCCACCACCTCACTCTGCTCCTTCCCTGTTGCCAATGTCTCGCTGACTA
AGGGTGGACGTGATCGGGTGCTGATGTATGGACAGCCGTATCGTGTTACCTTAGAGCTTGAGCTGCCAGAGTCCC
CTGTGAATCAAGATTTGGGCATGTTCTTGGTCAACATTTCTGCTACACCAGAGGTGGCCGAATCATCTCCACTT
CTTCGCGTTCGGTGATGCTGCATTACCGCTCAGACCTGCTCCAGATGCTGGACACACTGGTCTTCTCTAGCCTCC
TGCTATTTGGCTTTGCAGAGCAGAAGCAGCTGCTGGAGGTGGAACCTCTACGCAGACTATAGAGAGAACTCGTACG
TGCCGACCACTGGAGCGATCATTGAGATCCACAGCAAGCGCATCCAGCTGTATGGAGCCTACCTCCGCATCCACG
CGCACTTCACTGGGCTCAGATACCTGCTATACAACCTTCCCGATGACCTGCGCCTTCATAGGTGTTGCCAGCAACT
TCACCTTCTCAGCGTCATCGTGCTCTTCACTACATGCAGTGGGTGTGGGGGGGCATCTGGCCCCGACACCGCT
TCTCTTGCAGGTTAAACATCCGAAAAAGAGACAATTCCCGGAAGGAAGTCCAACGAAGGATCTCTGCTCATCAGC
CAGGTGCAGGGCCTGAAGGCCAGGAGGAGTCAACTCCGCAATCAGATGTTACAGAGGATGGTGAGAGCCCTGAAG
ATCCCTCAGGGACAGAGGGTCAGCTGTCCGAGGAGGAGAAACCAGATCAGCAGCCCTGAGCGGAGAAGAGGAGC
TAGAGCCTGAGGCCAGTGATGGTTCAGGCTCCTGGGAAGATGCAGCTTTGCTGACGGAGGCCAACCTGCCTGCTC
CTGCTCCTGCTTCTGCTTCTGCCCTGTCTAGAGACTCTGGGCAGCTCTGAACCTGCTGGGGGTGCTCTCCGAC
AGCGCCCCACCTGCTCTAGTTCCTGAAGAAAAGGGGCAGACTCCTCACATTCCAGCACTTTCCACCTGACTCCT
CTCCCTCGTTTTTCTTCAATAAACTATTTTGTGTGCTCAGCTTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3241

MSTEKVDQKEEAGEKEVCGDQIKGPDKEEEPAAASHGQGWRPGGRAARNARPEPGARHPALPAMVNDPPVPALL
WAQEVGQVLAGRARRLLLQFGVLFCTILLLLWVSFVLYGSFYYSYMP TVSHLSPVHFYYRTDCDSSTTSLCSFPV
ANVSLTKGGRDRVLMYGQPYRVTLLELELPESPVNQDLGMFLVTI SCYTRGGRIISTSSRSVMLHYRSDLLQMLDT
LVFSSLLLFGFAEQQLLEVELYADYRENSYVPTTGAIIEIHSKRIQLYGAYLRIHAHFTGLRYLLYNFPMTCAF
IGVASNFTFLSVIVLFSYMQVWGGIWPRHRFSLQVNIRKRDNSRKEVQRRISAHQPGAGPEGQEESTPQSDVTE
DGESPEDPSGTEGQLSEEEKPDQQPLSGEEELEPEASDGSGSWEDAALLTEANLPAPAPASASAPVLETLSSEP
AGGALRQRPTCSSS

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FIGURE 3242

GGCACGAGGGAGCGCTTGGGAGTTAGGTTGTTTGCCGGCGTAGCGGCCAGCGCCTGAGCCCCGCCGTTGATCTTCG
CTGTGGCATGGCGGACGAGGGGAAGTCGTACAGCGAACACGATGATGAACGCGTTAATTTCCCTCAAAGAAAGAA
GAAAGGCCGGGGTCCCTTCCGGTGGAATATGGTGAAGGAAACCGTAGGTCTGGAAGAGGCGGTTCTGGTATTCTG
GTCTTCCCGCCTTGAGGAAGATGATGGAGATGTGGCAATGAGTGATGCCAGGATGGTCCCCGAGTACGATACAA
CCCTATAACCACCGACCTAACCGTCGGGGTGATACTTGGCATGATCGAGATCGCATTATGTTACTGTGCGGAG
AGACAGAGCTCCTCCAGAGAGAGGAGGGGCTGGCACCAGCCAGGATGGGACCTCAAAGAAGTGGTTCAAGATTAC
AATTCCTTATGGCAGAAAGTATGACAAGGCATGGCTCCTGAGCATGATTCAGAGCAAGTGCAGTGTGCCCTTCAC
CCCTATTGAGTTTCACTATGAGAATACACGGGCCCCAGTTCTTCGTTGAAGACGCCAGTACTGCCTCTGCATTGAA
GGCTGTCAACTATAAGATTTTGGATCGGGAGAACCGAAGGATATCTATCATCATCAACTCTTCTGCTCCACCCCA
CACTATACTGAATGAAGTGAAGCCAGAACAAGTAGAACAGCTAAAGCTGATCATGAGCAAACGATACGATGGCTC
CCAACAAGCCCTTGACCTCAAAGGCCTCCGTTGAGACCCAGATTTGGTGGCCCAGAACATTGACGTTGTCTCGAA
TCGCAGAAGCTGTATGGCAGCTACCTGAGGATCATTGAAGAGAACATCCCTGAGCTATTGTCTTGAACCTTGAG
CAACAACAGGCTGTACAGGCTGGATGACATGTCTAGCATTGTTTGAAGGCACCCAACTGAAGATCCTAAACCT
TTCTGGAAATGAATTGAAGTCTGAGCGGAATTGGACAAGATAAAGGGGGCTGAAGCTAGAAGAGCTCTGGCTCGA
TGGAACTCCCTGTGTGACACCTTCCGAGACCAGTCCACCTACATCAGCGCCATTTCGCGAACGATTTCCCAAGTT
ACTACGCCTGGATGGCCATGAGCTACCCCCACCAATTGCCTTTTGATGTTGAAGCCCCACGACGTTACCGCCCTG
CAAGGGAAGCTATTTTGAACAGAAAAGTGAAGAGTCTGGTCTTGCACTTCTGCAACAGTACTATGCAATTTA
CGACTCTGGAGACCGACAAGGGCTCCTGGATGCCTACCATGATGGGGCTGCTGTTCCCTGAGCATTCTTTTCAT
TCCTCAGAACCCTGCCCCAAGCAGCTTAGCCGAGTATTTCAAGGATAGCAGAAATGTGAAGAAGCTTAAAGACCC
TACCTTGCGGTTCCGGCTGCTGAAGCACACGCGTCTCAACGTTGTTGCCCTTCTCAATGAGTTGCCCAAAACCCA
GCACGACGTCAATTCTTCGTGGTAGACATAAGCGCCAGACAAGCACATTGCTGTGTTTTCTGTCAATGGAGT
CTTCAAGGAAGTGGACGGAAAGTCCCGGGATTCTTTGCGAGCCTTACCCGGACATTCTGCTGTTCTCTGCTAG
CAATTCAGGGCTATGTATTGTAAATGATGAGCTATTTGTGCGGAATGCCAGTTCTGAAGAGATCCAAAGAGCCTT
CGCTATGCCTGCACCCACGCCTTCTCCAGCCCCGGTGCCACCCTCTCTCCAGAGCAGCAGGAAATGTTGCAAGC
ATTCTCTACCCAGTCTGGCATGAACCTCGAGTGGTCCCAGAAAGTGCCCTTCAGGACAACAAGTGGGACTACACCAG
ATCTGCCCAGGCCTTCACTCATCTCAAGGCCAAGGGCGAGATCCCAGAAGTGGCATTCTGAAGTGAATCGTAGTC
ATGCCCTCAGAAGCAGTCCCCCTGTAAATAGTCCTTGGATATTACCGTCTGGTTGTCTGTCTGTCTCTCTCTCTG
TCTGGCCCCGAGGCCGCCCCGTGACTGTGACCGAGGGAGGGAGGGCTGCCTGATCCCTCTCTCTGCTGCTTCTG
GAAGACTTCAGAAGATTGAGCCTCACTGGTGCCAGGAAGCCAAAGCTTACTTTGTAGAAGTGAACATAAAGTACC
CGAAGGACTTAGGTGCTTTGTGTACTTAACCCAGGACCTCCTTACTTTTAAATATAAAGAGTGATGTTGTAAAA
AAAAAAAAAAAAAA

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FIGURE 3243

MADEGKSYSEHDDERVNFPQRKKKGRGPFWRWYGEENRRSGRGGSGIRSSRLEEDDGDVAMSDAQDGPRVRYNPY
TTRPNRRGDTWHDRDRIHVTVRRDRAPPERGGAGTSQDGTSKNWFKITIPYGRKYDKAWLLSMIQSKCSVPFTP I
EFHYENTRAQFFVEDASTASALKAVNYKILDRENRRISIIINSSAPPHTILNELKPEQVEQLKLIMSKRYDGSQQ
ALDLKGLRSDPDLVAQNIDVVLNRRSCMAATLRIIEENIPELLSLNLSNNRRLYRLDDMSSIVQKAPNLKILNLSG
NELKSERELDKIKGLKLEELWLDGNSLCDTFRDQSTYISAIRERFPKLLRLDGHELPPPIAFDVEAPTTLPPCKG
SYFGTENLKSIVLHFLQYYAIYDSGDRQGLLDAYHDGACCSLSIPFIPQNPASSLAEYFKDSRNVKKLKDPTL
RFRLKHXTRLNVVAFINELPKTQHDVNSFVVDISAQTSTLLCFSVNGVFKEVDGKSRDSLRAFTRTFIAVPASNS
GLCIVNDEL FVRNASSEEIQRAFAMPAPTSSSPVPTLSPEQQEMLQAFSTQSGMNLEWSQKCLQDNNWDYTRSA
QAFTHLKAKGEIPEVAFMK

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FIGURE 3244

GAAC TTGCGGCGCGAAAAAGGCGCGCATGCGTCTACGGGAGCGTGCTGGCTCACCGACCGCATTGCGGCTTGGT
TTTCTCACCCAGTG CATGTGGCAGGAGCGGTGAGATCACTGCTCACGGCGATCCTGGACTGACGGTCACGACTG
CCTACCCTCTAACCTGTTCTGAGCTGCCCCCTTGCCACACACCCCAAACCTGTGTGCAGGATCCGCTCCATGG
AGCTACAGCCTCCTGAAGCCTCGATCGCCGTCGTGTGATTCCGCGCCAGTTGCCTGGCTCACATTGCGAGGCTG
GTGTCCAGGGTCTCAGCGCGGGGACGACTCAGAGTTGGGGTCTCACTGTGTGGCCAGACTGGTCTCGAACTCT
TGGCCTCAGGTGATCCTCTTCCCTCAGCTTCCCAGAATGCCGAGATGATAGAGACGGGGTCTGACTGTGTTACCC
AGGCTGGTCTTCAACTCTTGGCCTCAAGTGATCCTCCTGCCTTAGCTTCCAAGAATGCTGAGGTTACAGTAGAAA
CGGGGTTTACCATGTTAGCCAGGCTGATATTGAATTCCTGACCTCAATTGATCCGACTGCCTCGGCCCTCCGGAA
GTGCTGGGATTACAGGCACCATGAGCCAGGACACCGAGGTGGATATGAAGGAGGTGGAGCTGAATGAGTTAGAGC
CCGAGAAGCAGCCGATGAACGCGGCGTCTGGGGCGGCCATGTCCCTGGCGGGAGCCGAGAAGAATGGTCTGGTGA
AGATCAAGGTGGCGGAAGACGAGGCGGAGGCGGCAGCCGCGGCTAAGTTCACGGGCCTGTCCAAGGAGGAGCTGC
TGAAGGTGGCAGGCAGCCCCGGCTGGGTACGCACCCGCTGGGCACTGCTGCTGCTCTTCTGGCTCGGCTGGCTCG
GCATGCTTGCTGGTGCCGTGGTCATAATCGTGCGAGCGCCGCTTGTGCGGAGCTACCGGCGCAGAAGTGGTGGC
ACACGGGCGCCCTCTACCGCATCGGCGACCTTCAGGCCTTCCAGGGCCACGGCGCGGGCAACCTGGCGGGTCTGA
AGGGGCGTCTCGATTACCTGAGCTCTCTGAAGGTGAAGGGCCTTGTGCTGGGTCCAATTCACAAGAACCAGAAGG
ATGATGTCGCTCAGACTGACTTGCTGCAGATCGACCCCAATTTTGGCTCCAAGGAAGATTTTGACAGTCTCTTG
AATCGGCTAAAAAAAAGAGCATCCGTGTCACTTCTGGACCTTACTCCCACTACCGGGGTGAGAACTCGTGTTCT
CCACTCAGGTTGACACTGTGGCCACCAAGGTGAAGGATGCTCTGGAGTTTGGCTGCAAGCTGGCGTGGATGGGT
TCCAGGTTCCGGACATAGAGAATCTGAAGGATGCATCCTCATTCTTGGCTGAGTGGCAAAATATCACCAGGGCT
TCAGTGAAGACAGGCTCTTGATTGCGGGGACTAACTCCTCCGACCTTCAGCAGATCCTGAGCCTACTCGAATCCA
ACAAAGACTTGCTGTTGACTAGCTCATACCTGTCTGATTCTGGTTCTACTGGGGAGCATACAAAATCCTTAGTCA
CACAGTATTTGAATGCCACTGGCAATCGCTGGTGCAGCTGGAGTTTGTCTCAGGCAAGGCTCCTGACTTCCTTCT
TGCCGGCTCAACTTCTCCGACTCTACCAGCTGATGCTCTTACCCTGCCAGGGACCCCTGTTTTTACAGTACGGGG
ATGAGATTGGCCTGGATGCAGCTGCCCTTCTTGGACAGCCTATGGAGGCTCCAGTCATGCTGTGGGATGAGTCCA
GCTTCCCTGACATCCCAGGGGCTGTAAGTGCCAACATGACTGTGAAGGGCCAGAGTGAAGACCCCTGGCTCCCTCC
TTTCTTGTTCGGGCGGCTGAGTGACAGCGGAGTAAGGAGCGCTCCCTACTGCATGGGACTTCCACGCGTTCT
CCGCTGGGCTGGACTCTTCTCCTATATCCGCCACTGGGACCAGAATGAGCGTTTTTCTGGTAGTGCTTAACTTTG
GGGATGTGGGCTCTCGGCTGGACTGCAGGCCTCCGACCTGCCTGCCAGCGCCAGCCTGCCAGCCAAGGCTGACC
TCCTGCTCAGCAGCCAGCCAGGCCGTGAGGAGGGCTCCCTCTTGAGCTGGAACGCCTGAAACTGGAGCCTCAGC
AAGGGCTGCTGCTCCGCTTCCCTACGCGGCCTGACTTCAGCCTGACATGGACCCACTACCTTCTCCTTTCTT
CCCAGGCCCTTTGGCTTCTGATTTTTCTCTTTTTTAAAAACAAACAAACAACTGTTGCAGATTATGAGTGAACC
CCCAATAGGGTGTTTTCTGCCTTCAAATAAAAGTACCCCTGCATGGTG

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FIGURE 3245

GACAGCGGCTTCCTTGATCCTTGCCACCCGCGACTGAACACCGACAGCAGCAGCCTCACCATGAAGTTGCTGATG
GTCCTCATGCTGGCGGCCCTCTCCCAGCACTGCTACGCAGGCTCTGGCTGCCCCTTATTGGAGAATGTGATTTCC
AAGACAATCAATCCACAAGTGTCTAAGACTGAATACAAAGAACTTCTTCAAGAGTTCATAGACGACAATGCCACT
ACAAATGCCATAGATGAATTGAAGGAATGTTTTCTTAACCAAACGGATGAAACTCTGAGCAATGTTGAGGTGTTT
ATGCAATTAATATATGACAGCAGTCTTTGTGATTTATTTTAACTTTCTGCAAGACCTTTGGCTCACAGAACTGCA
GGGTATGGTGAGAAACCAACTACGGATTGCTGCAAACCACACCTTCTCTTTCTTATGTCTTTTACTACAAACTA
CAAGACAATTGTTGAAACCTGCTATACATGTTTATTTTAATAAAATTGATGGCA

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FIGURE 3246

MKLLMVLMLAALSQHCYAGSGCPLEENVISK TINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLS
NVEVFMQLIYDSSLCDLF

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FIGURE 3247

CGCCGCCGCTCCAGCGCCGCGCAGCCACCGCCGCCGCCGCTCTCCTTAGTCGCCGCCATGACGACCGCGTC
CACCTCGCAGGTGCGCCAGAACTACCACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAACCTGGAGCTCTA
CGCTCCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATA
CTTCTTCACCAATCTCATGAGGAGAGGGAAACATGCTGAGAACTGATGAAGCTGCAGAACCAACGAGGTGGCCG
AATCTTCCTTCAGGATATCAAGAAAACAGACTGTGATGACTGGGAGAGCGGGCTGAATGCAATGGAGTGTGCATT
ACATTTGGAAAAAATGTGAATCAGTCACTACTGGAAGTGCACAACTGGCCACTGACATGAAAGCCATCAAAGA
ATTGGGTGACCACGTGACCAACTTGCGCAAGATGGGAGCGCCCGAATCTGGCTTGGCGGAATATCTCTTTGACAA
GCACACCCTGGGAGACAGTGATAATGAAAGCTAAGCCTCGGGCTAATTTCCCATAGCCGTGGGGTGACTTCCCT
GGTCACCAAGGCAGTGCATGCATGTTGGGG

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FIGURE 3248

CTGGTGGGGGAAGAAGGCTCCTGCTACCTCCCTTCCCGGCACCCTCCAGAGGGACCCTCAGTCTGGCCTTGCAA
GCATGGACTCTTCTGAGGAGCACGCTGGGTGCCCCGCCGAGGGACATGTCCCGTGTTCCTGGCCATGAGTGCA
GGACTGTCCGCTACGCCCCATCAGGCCTGTGCCCTGTACTTGAGGGGAACCTGAGAGAAGAGCCCTGGGGCACAG
ACAGCCCACCCAGCCAGACCAGGGCCTCCCGCCGCCCTTGACAGCTGTCCCGGTCCCTTGGAAAGACACGGACC
CCTGCCAAGGCCACAGGGAGTCCCCAGGAGCCCTGGTGGAGACCTCTGCAGGGGAGGAGGCCGAGGCCAGGAGG
GCCCCGACGCCGCCAGCTGGACGTGTTGCGCCTGCGCAGCTCTTCCATGGAGATCCGAGAGAAGGGCTCCGAGT
TCCTGAAGGAGGAGCTGCACAGAGCGCAGAAGGAGCTGAAGCTAAAGGACGAGGAATGTGAGCGGTGTCCAAGG
TGCGGGAGCAGCTAGAACAGGAGCTGGAAGAGCTGACGGCCAGCCTGTTTGAGGAAGCTCACAGATGGTTTCGAG
AAGCCAACATGAAGCAGGCGGCATCAGAAAAGCAGCTGAAGGAGGCTCGGGGCAAGATCGACATGCTGCAGGCAG
AGGTGACAGCCTTGAAGACGCTGGTCATCAGTCCACACCAGCCTCTCCCAACCGCAGCTTCACCCCAAGCTGC
TGAGCCCCACCAAGGCCGGGCCCCGAAAGGGCCACTCTCGCCACAAGAGCACCAGCAGCACCCTTGCCCCGCCG
TGTGTCCCGCTGCGGGACACACCCTCACCCACAGACAGAGAGGGCAAGGAGGTGGACACAATCCTGTTTGCAGAGT
TCCAGGCCTGGAGGGAATCCCCACCCCTGGACAAGACCTGCCCTTCTTGAAAGGGTGTACCGGGAGGACGTGG
GCCCCTGCTGGACTTCAGATGCAGGAGCTCTCGGTGCTGGTACGGGCCGCCGTGGAGGACAACACGCTCACCA
TTGAGCCGGTGGCTTCGACAGCCTGCCCACAGTGAAGGTGGCCGAGGTTGACTGTAGCAGCACCACACATGTG
CCCTGAGCGGGCTGACCCGCACCTGCCGCCACCGAATCCGGCTCGGGGACTCCAAAAGCCATTACTACATCTCGC
CATCTTCCCGGGCCAGGATCACCGCAGTGTGCAACTTCTTACCTACATCCGCTACATCCAGCAAGGCCTGGTGC
GGCAGGACGCAGAGCCCATGTTCTGGGAGATCATGAGGTTGCGGAAGGAGATGTCACTGGCCAAGCTCGGCTTCT
TCCCCCAGGAGGCTTAGGGCGCGGCCCAGGCCTGAAGGGGAGCTCTGAGACAGAGCAAACACCCACCCAGAACA
AGCCGACACACAGGGAGACGGGGGCCTGGAGCCAGCCCTGAGCCAGAGGCAGAATGGATGGACAGACAGGCCATG
GAGGCAGCACTGAGCCAGCACCACACGTCCATCCTGGGACAGACGGGCCTGGACTTCACGGCAAGACCCCCCTCT
CTTCCCACTGGGTTCCTGCCACCACCAGGAGGATTTCAAGAAAGCACCAAAGACCAGGGAGCTCGGATCCATACT
CGGGGGGCTCAGCCCTTGGGAGGGGACACCTGAGGCAGCCAGCGCCCCCTCCCCAGTCCCCAGAACTGCCTGCA
GGTGCCCTTGTGCTGGCTTGTCTTCAGAAAGGGACTGTTCTGGGTGGCTGGATCTCCAGGGTACCCTCCACCCCA
GCTGCCAAGCCCTGGGCCAGCAGCACCCCTTGTGGCCATCCTGTGCCTTGTTCGCGGTGGCCTCCCTATTGGAC
TACTAGGAGGGGCTGGCAGGGCCTCCATAGCACAGAATTGCCCCAAAGCCTTGTTAAGATGAGTCAAGACCCCTC
CCCCGCTTCTCCCTTCCTTTCCCCCTTCTCCCTCCCCCTTCAAAAGGCCTCCCTTGTACCTTCCCTCCAC
CCCGTCTCAGCCCTGTGCTCCTGGAGGCCCTGCTCCAAAACCGCTGGAAGGACTGGGGCACTTCTGCCACAGT
AGAACACAGACAGGGCTTCAGATCGCCACGCCTGTTTTCAGCTGTGGGTGGCCATGCAGACACGCGCCCTGGCA
TGTGGGGCCTGGGTGGGCAGGCAGGACCTGGGCCCTCCACCCATCAGAGCCCACTCAGGACCAGCGTTTCGGAGC
TCCACCTGGACGCATCCCTCACCACGTCCGGATTCTTCTTGGATGGAATGTAACGCGATCTCTATTTAATA
AAGGCAGGCTTGTGGT

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FIGURE 3249

AGGGGGCGCGGTGGGAGGAGTAGGAGAAGACAAAAGCCGAAAGCGAAGAGGGCCCCGGGCTGCACACACCGGCTGG
GAGGCAGCCGTCTGTGCAGCGAGCAGCCGGCGCGGGAGGCCGAGTGACGGGGCGTCACAGTCGGCAGGCAGC
ATGGGGAAAGGGAGGGGAACCAGGGCGAGGGGGCCCGAGCGCGAGGTGTCGGTGCCACCTTCAGCTGGGAGGAG
ATTCAGAAGCATAACCTGCGCACCCGACAGGTGGCTGGTCATTGACCGCAAGGTTTACAACATCACCAAATGGTCC
ATCCAGCACCCGGGGGGCCAGCGGGTCATCGGGCACTACGCTGGAGAAGATGCAACGGATGCCTTCCGCGCCTTC
CACCTGACCTGGAATTCTGGGCAAGTTCTTGAAACCCCTGCTGATTGGTGAAGTGGCCCCGGAGGAGCCAGC
CAGGACCACGGCAAGAACTCAAAGATCACTGAGGACTTCCGGGGCCCTGAGGAAGACGGCTGAGGACATGAACCTG
TTCAAGACCAACCACGTGTTCTTCCCTCCTCCTGGCCACATCATCGCCCTGGAGAGCATTGCATGGTTCACT
GTCTTTTACTTTGGCAATGGCTGGATTCTACCTCATCACGGCCTTTGTCTTGTCTACCTCTCAGGCCCAAGCT
GGATGGCTGCAACATGATTATGGCCACCTGTCTGTCTACAGAAAACCCAAGTGAACACCTTGTCCACAAATTC
GTCATTGGCCACTTAAAGGGTGCCTCTGCCAAGTGGTGAATCATCGCCACTTCCAGCACCCAGCCAAGCCTAAC
ATCTTCCACAAGGATCCCGATGTGAACATGCTGCACGTGTTTGTCTGGGCGAATGGCAGCCCATCGAGTACGGC
AAGAAGAAGCTGAAATACCTGCCCTACAATCACCAGCACGAATACTTCTTCTGATTGGGCCGCGCTGCTCATC
CCCATGTATTTCCAGTACCAGATCATCATGACCATGATCGTCCATAAGAACTGGGTGGACCTGGCCTGGGCCGTC
AGCTACTACATCCGGTTCTTCATCACCTACATCCCTTTCTACGGCATCCTGGGAGCCCTCCTTTTCTCAACTTC
ATCAGGTTCTGGAGAGCCACTGGTTTGTGTGGGTACACAGATGAATCACATCGTCATGGAGATTGACCAGGAG
GCCTACCGTGACTGGTTTCAGTAGCCAGCTGACAGCCACCTGCAACGTGGAGCAGTCCTTCTTCAACGACTGGTTT
AGTGGACACCTTAACCTCCAGATTGAGCACCACCTCTTCCCCACCATGCCCCGGCACAACCTTACACAAGATCGCC
CCGCTGGTGAAGTCTCTATGTGCCAAGCATGGCATTGAATACCAGGAGAAGCCGCTACTGAGGGCCCTGCTGGAC
ATCATCAGGTCCCTGAAGAAGTCTGGGAAGTGTGGCTGGACGCCCTACCTTCACAAATGAAGCCACAGCCCCCGG
GACACCGTGGGGAAGGGGTGCAGGTGGGGTGATGGCCAGAGGAATGATGGGCTTTTGTCTGAGGGGTGTCCGAG
AGGCTGGTGTATGCACTGCTCACGGACCCCATGTTGGATCTTTCTCCCTTTCTCCTCTCCTTTTTCTCTTCACAT
CTCCCCATAGCACCCCTGCCCTCATGGGACCTGCCCTCCCTCAGCCGTCAGCCATCAGCCATGGCCCTCCCAGTG
CCTCCTAGCCCCCTTCTTCCAAGGAGCAGAGAGGTGGCCACCGGGGGTGGCTCTGTCTCTACCTCCACTCTCTGCC
CTAAAGATGGGAGGAGACCAGCGGTCCATGGGTCTGGCCTGTGAGTCTCCCCTTGACGCTGGTCACTAGGCATC
ACCCCCGCTTTGGTTCTTCAGATGCTCTTGGGGTTCATAGGGGCAGGTCTAGTCGGGCAGGGCCCCCTGACCCTC
CCGGCTTGGCTTCACTCTCCCTGACGGCTGCCATTGGTCCACCCCTTTTCATAGAGAGGCCTGCTTTGTACAAAGC
TCGGGTCTCCCTCCTGCAGCTCGGTTAAGTACCCGAGGCCCTCTCTTAAGATGTCCAGGGCCCCAGGCCCGCGGGC
ACAGCCAGCCCAAACCTTGGGCCCTGGAAGAGTCTCCACCCCATCACTAGAGTGTCTGACCTGGGCTTTTAC
GGGCCCCATTCCACCGCCTCCCCAACTTGAGCCTGTGACCTTGGGACCAAAGGGGGAGTCCCTCGTCTCTTGTGA
CTCAGCAGAGGCAGTGGCCACGTTGAGGGAGGGGCCGGCTGGCCTGGAGGCTCAGCCACCCTCCAGCTTTTCT
CAGGGTGTCTGAGGTCCAAGATTCTGGAGCAATCTGACCCTTCTCCAAAGGCTCTGTTATCAGCTGGGCAGTGC
CAGCCAAATCCCTGGCCATTGGCCCCAGGGGACGTGGGCCCTGCAGGCTGCAGGAGGGCACTGGAGCTGGGAGGT
CTCGTCCCAGCCCTCCCCATCTCGGGGCTGCTGTGTGGACGGCGCTGCCTCAGGCACTCTCCTGTCTGAACCTGC
CCTTACTGTGTTTAACTGTGTGCTCCAGGATGCATTCTGATAGGAGGGGGCGGCAGGGCTGGGCCTTGTGACAAT
CTGCCCTTACCACATGGCCTTGCCCTCGGTGGCCCTGACTGTGAGGGAGGGCCAGGGAGGCAGAGCGGGAGGGAG
TCTCAGGAGGAGGCTGCCCTGAGGGGCTGGGGAGGGGGTACCTCATGAGGACCAGGGTGGAGCTGAGAAGAGGAG
GAGGTGGGGGCTGGAGGTGCTGGTAGCTGAGGGGACGGGCAAGTGAGAGGGGAGGGAGGGGAAGTCTTGGGAGGAT
CCTGAGCTGCTGTTGCACTTAACCCACTAATCAGTTCTTAGATTGAGGGGAAGGGCAGGCACCAACAACCTCAGA
ATGGGGGCTTTCCGGGAGGGCGCCTAGTCCCCCAGCTCTAAGCAGCCAGGAGGGACCTGCATCTAAGCATCTGG
GTTGCCATGGCAATGGCATGCCCCCAGCTACTGTATGCCCCGACCCCCGAGAGGCAGAATGAACCCATAGGG
AGCTGATCGTAATGTTTATCATGTTACTTCCCCACCCCTACATTTTTTGAAATAAAATAAGGAATTTTATTCTC

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FIGURE 3250

MGKGGNQGEAAEREVSPTFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHPGGQRVIGHYAGEDATDAFRAF
HPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKITEDFRALRKTAEDMNLFKTNHVFFLLLLLAHIIALESIAWFT
VFYFGNGWIPTLITAFVLATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVI GHLKGASANWWNHRHFQHHAKPN
IFHKDPDVNMLHVFLGEWQPIEYGKKKLKYL PYNHQHEYFFLIGPPLLI PMYFQYQIIMTMIVHKNWVDLAWAV
SYYIRFFITYIPFYGILGALLFLNFIRFLESHWFVWVTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWF
SGHLNFQIEHHLFPTMPRHNHKKIAPLVKSLCAKHGIEYQEKPLL RALLDIIRSLKKSGKLWLDAYLHK

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FIGURE 3251A

TCCACTCCTGGAGCCCCGCGGACCCCGAGCAGCGCCTGACAGCCCCTGCTGGCCCCGGCGCGGGCGTCGCCAGGC
 CAGCTATGGCCCCCGACCCGGTGGCCGCCGAGACCGCGGCTCAGGGACCTACCCCGCGCTACTTCACCTGGGACG
 AGGTGGCCCCAGCGCTCAGGGTGCAGGAGCGGTGGCTAGTGATCGACCGTAAGGTGTACAACATCAGCGAGTTCA
 CCCGCCGGCATCCAGGGGGCTCCCGGGTCATCAGCCACTACGCCGGGCAGGATGCCACGGATCCCTTTGTGGCCT
 TCCACATCAACAAGGGCCCTTGTGAAGAAGTATATGAACTCTCTCCTGATTGGAGAACTGTCTCCAGAGCAGCCCA
 GCTTTGAGCCCCACCAAGAAATAAAGAGCTGACAGATGAGTTCCGGGAGCTGCGGGCCACAGTGGAGCGGATGGGSC
 TCATGAAGGGCCAACCATGTCTTCTTCTGCTGTACCTGCTGCACATCTTGCTGCTGGATGGTGCAGCCTGGCTCA
 CCCTTTGGGTCTTTGGGACGTCTTTTGGCCCTTCTCCTCTGTGCGGTGCTGCTCAGTGCAGTTCAGGCCCAGG
 CTGGCTGGCTGCAGCATGACTTTGGGCACCTGTGCGTCTTCAGCACCTCAAAGTGAACCATCTGCTACATCATT
 TTGTGATTGGCCACCTGAAGGGGGCCCCCGCCAGTTGGTGAACACATGCACCTCCAGCACCATGCCAAGCCCA
 ACTGCTTCCGCAAAGACCCAGACATCAACATGCATCCCTTCTTCTTTGCCCTTGGGGAAGATCCTCTCTGTGGAGC
 TTGGGAAACAGAAGAAAAAATATATGCCGTACAACCACCAGCACAAATACTTCTTCTTAATTGGGCCCCCAGCCT
 TGCTGCCCTCTCTACTTCCAGTGGTATATTTTCTATTTTGTATCCAGCGAAAGAAGTGGGTGGACTTGGCCTGGA
 TGATTACCTTCTACGTCCGCTTCTTCTCACTTATGTGCCACTATTGGGGCTGAAAGCCTTCTGGGCCCTTTTCT
 TCATAGTCAGGTTCTTGGAAAGCAACTGGTTTGTGTGGGTGACACAGATGAACCATATTCCCATGCACATTGATC
 ATGACCGGAACATGGACTGGGTTTCCACCCAGCTCCAGGCCACATGCAATGTCCACAAGTCTGCCTTCAATGACT
 GGTTCAGTGGACACCTCAACTCCAGATTGAGCACCATCTTTTTCCACGATGCCTCGACACAATTACCACAAAG
 TGGCTCCCCCTGGTGCAGTCTTGTGTGCCAAGCATGGCATAGAGTACCAGTCCAAGCCCCTGCTGTGAGCCTTCTG
 CCGACATCATCCACTCACTAAAGGAGTCAGGGCAGCTCTGGCTAGATGCCTATCTTACCAATAACAACAGCCAC
 CCTGCCAGTCTGGAAGAAGAGGAGGAAGACTCTGGAGCCAAGGCAGAGGGGAGCTTGAGGGACAATGCCACTAT
 AGTTTAATACTCAGAGGGGTTGGGTTTGGGGACATAAAGCCTCTGACTCAAACCTCCTCCCTTTTATCTTCTAGC
 CACAGTTCTAAGACCCAAAGTGGGGGTGGACACAGAAGTCCCTAGGAGGGAAGGAGCTGTTGGGGCAGGGGTGT
 AAATTATTTCTTTTCTAGTTTGGCAGATGCAGGTAGTTGGTGAACAGAGAGAACCAGGAGGGTAACAGAAGAG
 GAGGGACCTACTGAACCCAGAGTCAGGAAGAGATTTAACTAAATTTCCACTCATGCCGGGCGTGGTGGCACGC
 GCCTGTAATCCAGCTACCCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCGGGGAGGTGGAGGTTGCAGTGAGC
 TGAGATCACGCCATTGTACTCCAGCCTGGGCGACAGAGCAAGACTCCATTTCAAAAAAAAAAAAAAAAAATCCACTC
 ATATAAAAGGTGAGCTCAGCTCACTGGTCCATTTCTCAGTGGCTTCTCCATCCTCATTGTCAAACCTCAGAGGGA
 TAAGGCAGTTGAACCTGATGAGCAAGAATTATAACAGCAAGGAAACATTAATGCTTAGAATTCTGAGATCCAGCA
 CAACTCAGTCTGTGGGAGCTCAGCTCGCTGCCAGGGATAGGTATGACCTATGTCTGCCTTAGGCTGCTGGGAGA
 TGCCATTCTCCAGTTTCAGAAAGCAGGCAGGGCAAAGGTCAAGACTGTGGTATTGGGGTCTTTTGGCTCTGAAGGA
 TCCTGGAACCACTGATTTTGGTTTATTCCTCCAGGGTCTAAAGAGAACAAGAGGTGCTAGCTCTTACCAAAACA
 GATGGTAGAGAGAGTTGCTGGCTATTTAAAAAGCTCTTTTCTCTTTTAAATTCACCTCTTCTTTTACCTCTTTAA
 CCCTCCTCAGGAACAGAACACTTCTAGGACTGGGGGTCTTTTAGCTCCATAAGCAAGTGAGCAGATGGGACAAG
 TTAGTCTTTTCTCCCTAGAAACAAAGGGGATGCCAGTGGTTTCCCTTTGCTTCCCAACCTAAAATTTCAAGTTT
 AATAAAATAGCAATTAGCAGAAGTGACCAATTTGGGAGATAATTATCAGTCATGAGGAAAGACACAGATTTCCGT
 CATAAAGAAATGTAAGGGCTATAAGTAGAACTTTCTATAACCTAAATGATGTTATAGAATTATTTTGGAGGGA
 GCAGAAAGATTAAATATGATCACTTCATCTTCTAAATCAGAAATAGGAAGATTAAACACAGAACAGTTTGTG
 ATTTCTATTGCTGTAGCTAGGTATCTTACTCTGTCCACTCTTGTTCAGTATCTAAGTATCTTCTGGAACCAATA
 GGCTTTAGAAGAGATTATCCTATATTCTATCAGTATAATACTAAAATGTAACCTTTTAAATCATCTGGTTTTTAA
 AAGATAAACAGTTTAGCCCATCTCTCCAGAGAGCAACATAGGAATATGACTCAGGAGCCTCCTAGGGCTTATCA
 TCAGCCCTCACACCCGCTTCCCCCTCCAACCCACAGCCTTTGCTTCCAGGTGGCAGGATTACTACTTTGCCTCTT
 CAGCAGCATCTACTCTAGGCATATTGATCATTTTAGACACTGGGAGAAGAGAACCTCAAACCTAGGAGGAAAAGAC
 AGAGCCTCCACTTAGTTTGGGAGGGGATGGCAGACAGTCAAGGAGATGAGCGTCCTAAGGCATGTTGGGATAGG
 GTCAGATGCACCAACCATGGAGAGGTTTGTCAACACAAAGACATGGAAGGTTAGAGGTTTGTCAACAAAAAGACA
 TGGAAGGTTAGGTTTGTCAACACAAAGACATGGAAGATTAGAGGTTTGTCAACACAAAGACACAGGAAGAATGGG
 CTGCAGAAGATTAGATGTTTTCCATTTGGGCACATTTTACTTAGCTGGAGAACTAGGTTTTAAACAGCCTGGGT
 AGGAAAATTAGAAGCAAGCTGGATGCAGTGGCTCATGCCTGTAATCCCAACACTTTTGGGAGGTCCAGGCAGGAG
 GATCACTTGGGCCCAGGAGGTCAAGCCTGCAGCGAGCTGAGATCACACCACTGCACTCCAGCCTGGGGTGATAGA

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FIGURE 3251B

ACAAGACCCTGTCTCAAAAAAAAAAAAAAAAAACAACAAAACTTAGAATTGAGGAGTTGTACCTCCATTGGCTTCCT
CACTCCAAAATAGGTGCTGATCCTTCCTATTCTATTCTTTGCCACCTTTTGGGTGTGGTGTACCCAGCCTGTTT
AGCCAAGTAGCTTTGGGCATAGGCTGCCCAATCTGAGCAAAACCCAGTGAGGCTCTATTGAGCCAAGACCAAGTC
CTCAAAGCACCTGAACCACTGTGGCCTTCTCAGCCTACAGCAGTGTTGGTCTCTTACATGGCCACAAAGGGACACA
CAGTGACAAAAGGCTCGGAATGTTACAATGGTAAAATGAGTGATCTCAAATCCACTGACAGATATAAAATAGGCT
TAGAGAGGAAAAGCTGCCTCTGGTCAAGTAGATCATGGCAGCATGAATTCCAACCTCACTTTTTTACAACCTCCAAC
TTCTATGTTTATCTTTGTTACTTTCACTTTTTTACAACCTGGCCAGAGGCATTTTTTAAATCAGGCCCAATATCA
GTATTCTTTTTGTGTGTGCCAATTTGTTATCACATCCCTATGAAGTTGAAAAATAAAGTTAATTTTGACCAAAA
AAAAAAAAAAAAAG

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FIGURE 3252

MAPDPVAAETAAQGPTPRYFTWDEVAQRSGCEERWLVIDRKVYNISEFTRRHPPGGSRVISHYAGQDATDPFVAFH
INKGLVKKYMNSLLIGELSPEQPSFEPTKNKELTDEFREL RATVERMGLMKANHVFLLYLLHI LLLDGAAWLTL
WVFGTSFLPFLLCAVLLSAVQAQAGWLQHD FGHLSV FSTSKWNHLLHHFVI GHLKGAPASWWNHMHFQHHAKPNC
FRKDPDINMH PFF FALGKILSVELGKQKKKYPYNHQHKYFFLIGPPALLPLYFQWYIFYFYVIQRKKWVDLAWMI
TFYVRFFLT YVPLLGLKAFLGLFFIVRFLESNWFVWVTQMNHIPMHIDHNRNMDWVSTQLQATCNVHKSAFNDWF
SGHLNFQIEHHLFP T MPRHNYHKVAPLVQSLCAKHGIEYQSKPLLSAFADIIHSLKESGQLWLDAYLHQ

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FIGURE 3253

AGTCCTGCGATTTCGGGTGTAGAGGGAGCAGGGGCTGCGGGGACCTGGTGTGGGTGGAGTGGGGACAAGCGGTG
GAGAAGGGTACGCCAGGGTCGCTGAGAGACTCTGTTCTCCCTGGAGGGACTGGTTGCCATGAGAGCAGCCGTCTG
AGGGGACGCAGCCTGCACTACGCGCCCCAAGAGGCTGTGCGTGGCGAGCAGGTACGTGACGGGAGCGCGGGCTT
TGGAAGGCGGCTGAACGTCAGGCCACCCGCCGCTAAGCTGAGAAGGGAGAGCGAGCTTAGGACCGCCTGCCCGGG
GCAACCCCGAACCAAGCTTTAGCCGCCGAGGCCGCGTGTCCCAAAGGCCAGTCATCCCTCCTCTGTGTTGCCATG

GGAATTCAGGGCTGGCCAACTAATTGCTGATGTGGCCCCAGTGCCATCCGGGAGAATGACATCAAGAGCTAC
TTTGGCCGTAAGGTGGCCATTGATGCCTCTATGAGCATTATCAGTTCCTGATTGCTGTTCCGCAGGGTGGGGAT
GTGCTGCAGAATGAGGAGGGTGAGACCACCAGCCACCTGATGGGCATGTTCTACCGCACCATTTCGCATGATGGAG
AACGGCATCAAGCCCGTGTATGTCTTTGATGGCAAGCCGCCACAGCTCAAGTCAGGCGAGCTGGCCAAACGCAGT
GAGCGGCGGGCTGAGGCAGAGAAGCAGCTGCAGCAGGCTCAGGCTGTGCGGGCCGAGCAGGAGGTGAAAAATTC
ACTAAGCGGCTGGTGAAGGTCACTAAGCAGCACAATGATGAGTGCAAACATCTGCTGAGCCTCATGGGCATCCCT
TATCTTGATGCACCCAGTGAGGCAGAGGCCAGCTGTGCTGCCCTGGTGAAGGCTGGCAAAGTCTATGCTGCGGCT
ACCGAGGACATGGACTGCCTCACCTTCGGCAGCCCTGTGCTAATGCGACACCTGACTGCCAGTGAAGCCAAAAG
CTGCCAATCCAGGAATTCACCTGAGCCGGATTCTGCAGGAGCTGGGCCTGAACCAGGAACAGTTTGTGGATCTG
TGCATCCTGCTAGGCAGTGACTACTGTGAGAGTATCCGGGGTATTGGGCCCCAAGCGGGCTGTGGACCTCATCCAG
AAGCACAAGAGCATCGAGGAGATCGTGCGGCGACTTGACCCCAACAAGTACCCTGTGCCAGAAAATTGGCTCCAC
AAGGAGGCTCACCAGCTCTTCTTGAACCTGAGGTGCTGGACCCAGAGTCTGTGGAGCTGAAGTGGAGCGAGCCA
AATGAAGAAGAGCTGATCAAGTTCATGTGTGGTGAAGCAGTTTCTCTGAGGAGCGAATCCGCAGTGGGGTCAAG
AGGCTGAGTAAGAGCCGCCAAGGCAGCAGCCAGGGCCGCTGGATGATTTCTTCAAGGTGACCGGCTCACTCTCT
TCAGCTAAGCGCAAGGAGCCAGAACCCAGGGATCCACTAAGAAGAAGGCAAAGACTGGGGCAGCAGGGAAGTTT
AAAAGGGGAAAAATAATGTGTTTCCCCATTATACCTCCTTCACCCAGAATATTTGCCGTCTTGTACCCTTAAGA
GCTACAGCTAGAGAAACCTTCACGGGGTGGAGAGAGGATTCTAAGGCTTTTCTAGCGTGACCCTTTTCAGTAGTG
CTAGTCCCTTTTTTACTTGATCTTAATGGCAAGAAGGCCACAGAGGTACTTTTCTTTTTTAGCTCAGGAAAATA
TGTCAGGCTCAAACCACTTCTCAGGCAGTTAATGGACACTAAGTCCATTGTTACATGAAAGTGATAGATAGCAA
CAAGTTTTGGAGAAGAGAGAGGGGAGATAAAAAGGGGGAGACAAAAGATGTACAGAAATGATTTCTGGCTGGCCAA
CTGGTGGCCAGTGGGAGGTGATGGTGGACCTAGACTGTGCTTTTCTGTCTTGTTCAGCCTTGACCCACCTTGAGA
GAGAGCCACCAGGAAGGCGCATCTTAGCAGATGGGAGGAACTGCTGAGAGAAGATGGGCAGAAAGCTGGAGCCCC
TGGAGTTGGCTGTGTCTGTGTTGTGACTGATTACTGGCTGTGCTTGGGTGGGCAGAACTCGAACTTGCTATG
TAATTTGTGTCTAGTTATTCAGAGGAGTAAGATGGTGATGTTACCTGGCAATCAGCTGAGTTGAGACTTTGGAA
TAAGACACTGGTTTTATGCGCTGTTTTTGTGTTTAAAGTTATGAAGAAAAAAGTCAATAAAATTCTAAAAGTAA
AAAAAAAAAAAAAA

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FIGURE 3254

MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSIYQFLIAVRQGGDVLQNEEGETTSHLMGMFYRTIRMM
ENGIKPVYVFDGKPPQLKSGELAKRSERRAEAEKQLQQAQAAGAEQEVEKFTKRLVKVTKQHNDCKHLLSLMGI
PYLDAPSEAEASCAALVKAGKVYAAATEDMDCLTFGSPVLMRHLTASEAKKLPIQEFHLSRILQELGLNQE QFVD
LCILLGSDYCESIRGIGPKRAVDLIQKHKSIEEIVRRLDPNKYPVPENWLHKEAHQLFLEPEVLDPEVELKWSE
PNEEELIKFMCGEKQFSEERIRSGVKRLSKSRQGSTQGRLDDFFKVTGSLSSAKRKEPEPKGSTKKKAKTGAAGK
FKRGK

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FIGURE 3255

CAGGTGACCAGCGCCATGTCCAGCCAGGTGGTGGGCATTGAGCCTCTCTACATCAAGGCAGAGCCGGCCAGCCCT
GACAGTCCAAAGGGTTCCCTCGGAGACAGAGACCGAGCCTCCTGTGGCCCTGGCCCCCTGGTCCAGCTCCCACTCGC
TGCTCCCAGGCCACAAGGAAGAGGAGGATGGGGAGGGGGCTGGGCCTGGCGAGCAGGGCGGTGGGAAGCTGGTG
CTCAGCTCCCTGCCCAAGCGCCTCTGCCTGGTCTGTGGGGACGTGGCCTCCGGCTACCACTATGGTGTGGCATCC
TGTGAGGCCTGCAAAGCCTTCTTCAAGAGGACCATCCAGGGGAGCATCGAGTACAGCTGTCCGGCCTCCAACGAG
TGTGAGATCACCAAGCGGAGACGCAAGGCCTGCCAGGCCTGCCGCTTCACCAAGTGCCTGCGGGTGGGCATGCTC
AAGGAGGGAGTGCCTGGACCGCTCCGGGGTGGGCGGCAGAAAGTACAAGCGGCGGCCGGAGGTGGACCCACTG
CCCTTCCCGGGCCCCCTTCCCTGCTGGGCCCCCTGGCAGTGCCTGGAGGCCCCCGGAAGACAGCAGCCCCAGTGAAT
GCACTGGTGTCTCATCTGCTGGTGGTTGAGCCTGAGAAGCTCTATGCCATGCCTGACCCCGCAGGCCCTGATGGG
CACCTCCCAGCCGTGGCTACCCTCTGTGACCTCTTTGACCGAGAGATTGTGGTCACCATCAGCTGGGCCAAGAGC
ATCCAGGCTTCTCATCGCTGTCGCTGTCTGACCAGATGTCAGTACTGCAGAGCGTGTGGATGGAGGTGCTGGTG
CTGGGTGTGGCCAGCGCTCACTGCCACTGCAGGATGAGCTGGCCTTCGCTGAGGACTTAGTCCTGGATGAAGAG
GGGGCACGGGCAGCTGGCCTGGGGGAACTGGGGGCTGCCCTGCTGCAACTAGTGCGGCGGCTGCAGGCCCTGCGG
CTGGAGCGAGAGGAGTATGTTCTACTAAAGGCCTTGGCCCTTGCCAATTCAGACTCTGTGCACATCGAAGATGCC
GAGGCTGTGGAGCAGCTGCGAGAAGCTCTGCACGAGGCCCTGCTGGAGTATGAAGCCGGCCGGGCTGGCCCCGGA
GGGGGTGCTGAGCGGCGGCGGGCGGGCAGGCTGCTGCTCACGCTACCGCTCCTCCGCCAGACAGCGGGCAAAGTG
CTGGCCCATTTCTATGGGGTGAAGCTGGAGGGCAAGGTGCCCATGCACAAGCTGTTCTTGGAGATGCTCGAGGCC
ATGATGGACTGAGTGCAAGGGGTGGGACTGGTGGGGGTTCTGGCAGGACCTGCCTAGCATGGGGTCAGCCCCAAG
GGCTGGGGCGGAGCTGGGGTCTGGGCAGTGCCACAGCCTGCTGGCAGGGCCAGGCAATGCCATCAGCCCCCTGGGA
ACAGGCCCCACGCCCCTCTCCTCCCCCTCCTAGGGGGTGTGAGAAGCTGGGAACGTGTGTCCAGGCTCTGGGCACA
GTGCTGCCCCCTTGCAAGCCATAACGTGCCCCCAGAGTGTAGGGGGCCTTGCGGAAGCCATAGGGGGCTGCACGGG
ATGCGTGGGAGGCAGAAACCTATCTCAGGGAGGGAAAGGGGATGGAGGCCAGAGTCTCCAGTGGGTGATGCTTTT
GCTGCTGCTTAATCCTACCCCCTCTTCAAAGCAGAGTGGGACTTGGAGAGCAAAGGCCCATGCCCCCTTCGCTCC
TCCTCTCATCATTTGCATTGGGCATTAGTGTCCCCCTTGAAGCAATAACTCCAAGCAGACTCCAGCCCCCTGGAC
CCCTGGGGTGGCCAGGGCTTCCCCATCAGCTCCCAACGAGCCTCCTCAGGGGGTAGGAGAGCACTGCCTCTATGC
CCTGCAGAGCAATAACACTATATTTATTTTGGGTTTGGCCAGGGAGGCGCAGGGACATGGGGCAAGCCAGGGCC
CAGAGCCCTTGACTGTACAGAGACTCTATTTAATGTATATTTGCTGCAAAGAGAAACCGCTTTTGGTTTTAAAC
CTTTAATGAGAAAAAATATATAATACCGAGCTC

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FIGURE 3256

CACGGGCGGGGCGGGGCCTGGGTCCACCGGGGTTCTGAGGGGAGACTGAGGTCCTGAGCCGACAGCCTCAGCTCC
CTGCCAGGCCAGACCCGGCAGACAGATGAGGGCCCAGGAGGCCTGGCGGGCCTGGGGGCGCTACGGTGGGAGAGG
AAGCCAGGGGTACCTGCCTCTGCCTTCCAGGGCCACCGTTGGCCCCAGCTGTGCCTTGACTACGTAACATCTTGT
CCTCACAGCCCAGAGCATGTTCCAGATCCCAGAGTTTGAGCCGAGTGAGCAGGAAGACTCCAGCTCTGCAGAGAG
GGGCCTGGGCCCCAGCCCCGAGGGGACGGGGCCCTCAGGCTCCGGCAAGCATCATCGCCAGGCCCCAGGCCTCCT
GTGGGACGCCAGTCAACCAGCAGGAGCAGCCAACCAGCAGCAGCCATCATGGAGGCGCTGGGGCTGTGGAGATCCG
GAGTCGCCACAGCTCCTACCCCGCGGGGACGGAGGACGACGAAGGGATGGGGGAGGAGCCCAGCCCCCTTTCGGGG
CCGCTCGCGCTCGGCGCCCCCAACCTCTGGGCAGCACAGCGCTATGGCCGCGAGCTCCGGAGGATGAGTGACGA
GTTTGTGGACTCCTTTAAGAAGGGACTTCCTCGCCCGAAGAGCGCGGGCACAGCAACGCAGATGCGGCAAAGCTC
CAGCTGGACGCGAGTCTTCCAGTCTTGGTGGGATCGGAACCTTGGGCAGGGGAAGCTCCGCCCCCTCCAGTAGACC
TTCGCTCCACATCCCGAAACTCCACCCGTTCCCACTGCCCTGGGCAGCCATCTTGAATATGGGCGGAAGTACTTC
CCTCAGGCCTATGCAAAAAGAGGATCCGTGCTGTCTCCTTTGGAGGGAGGGCTGACCCAGATTCCCTTCCGGTGC
GTGTGAAGCCACGGAAGGCTTGGTCCCATCGGAAGTTTTGGGTTTTCCGCCACAGCCGCCGGAAGTGGCTCCGT
GGCCCCGCCCTCAGGCTCCGGGCTTTCCCCCAGGCGCCTGCGCTAAGTCGCGAGCCAGGTTTAACCGTTGCGTCA
CCGGGACCCGAGCCCCCGCGATGCCCTGGGGGCCGTGCTCACTACCAAATGTTAATAAAGCCCGCGTCTGTGCCG
CC

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FIGURE 3257

MFQIPEFEPSEQEDSSSAERGLGPSPAGDGPSGSGKHHRQAPGLLWDASHQQEQPTSSSHGGAGAVEIRSRHSS
YPAGTEDDEGMGEEPSPFRGRSRSAPPNLWAAQRYGRELRRMSDEFVDSFKKGLPRPKSAGTATQMRQSSSWTRV
FQSWDRNLGRGSSAPSQ

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FIGURE 3258

GAGCCCGGGGTGCTGGAGGGAGGCGGCAGGCCCGGGTCAGGTGCCTCGAGATCGGGCTTGGGCCCAGAGCATGTT
CCAGATCCCAGAGTTTGAGCCGAGTGAGCAGGAAGACTCCAGCTCTGCAGAGAGGGGCCTGGGCCCCAGCCCCGC
AGGGGACGGGCCCTCAGGCTCCGGCAAGCATCATCGCCAGGCCCCAGGCCTCCTGTGGGACGCCAGTCACCAGCA
GGAGCAGCCAACCAGCAGCAGCCATCATGGAGGCGCTGGGGCTGTGGAGATCCGGAGTCGCCACAGCTCCTACCC
CGCGGGGACGGAGGACGACGAAGGGATGGGGGAGGAGCCCAGCCCCCTTTCGGGGCCGCTCGCGCTCGGCGCCCCC
CAACCTCTGGGCAGCACAGCGCTATGGCCGCGAGCTCCGGAGGATGAGTGACGAGTTGTGGACTCCTTTAAGAA
GGGACTTCCTCGCCCGAAGAGCGCGGGCACAGCAACGCAGATGCGGCAAAGCTCCAGCTGGACGCGAGTCTTCCA
GTCCTGGTGGGATCGGAACTTGGGCAGGGGAAGCTCCGCCCCCTCCAGTAGACCTTCGCTCCACATCCCGAAACT
CCACCCGTTCCTACTGCCCTGGGCAGCCATCTTGAATATGGGCGGAAGTACTTCCCTCAGGCCTATGCAAAAAGA
GGATCCGTGCTGTCTCCTTTGGAGGGAGGGCTGACCCAGATTCCCTTCCGGTGCGTGTGAAGCCACGGAAGGCTT
GGTCCCATCGGAAGTTTGGGTTTTCCGCCCACAGCCGCCGGAAGTGCTCCGTGGCCCCGCCCTCAGGCTCCGG
GCTTTCCCCCAGGCGCCTGCGCTAAGTCGCGAGCCAGGTTTAAACGTTGCGTCACCGGGACCCGAGCCCCCGCGA
TGCCCTGGGGGCCGTGCTCACTACCAAATGTTAATAAAGCCGCGTCTGTGCCGCC

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FIGURE 3259

MFQIPEFEPSEQEDSSSAERGLGFPSPAGDGPSGSGKHHRQAPGLLWDASHQQEQPTSSSHHGGAGAVEIRSRHSS
YPAGTEDDEGMGEEPSPFGRGRSRSAPPNLWAAQRYGRELRMSDEFVDSFKKGLPRPKSAGTATQMRQSSSWTRV
FQSWWDRNLGRGSSAPSQ

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FIGURE 3260

GGCGAGGAAGGGGCGGGAGCCGGGTCCCGGTAGCTTCTAGTAGGTTCCAGAAGGCGGCGCGTGCGGTTGGGAAC
GCGGAGCGGACGGATTTCGATTCAACGGGGTTCCGGACCGCGCTGCGCTATGGAGCAGGTCAATGAGCTGAAGGAG
AAAGGCAACAAGGCCCTGAGCGTGGGTAACATCGATGATGCCTTACAGTGCTACTCCGAAGCTATTAAGCTGGAT
CCCCACAACCACGTGCTGTACAGCAACCGTTCTGCTGCCTATGCCAAGAAAGGAGACTACCAGAAGGCTTATGAG
GATGGCTGCAAGACTGTGACCTAAAGCCTGACTGGGGCAAGGGCTATTACGAAAAGCAGCAGCTCTAGAGTTC
TTAAACCGCTTTGAAGAAGCCAAGCGAACCTATGAGGAGGGCTTAAAACACGAGGCAAATAACCCTCAACTGAAA
GAGGGTTTACAGAATATGGAGGCCAGGTTGGCAGAGAGAAAATTCATGAACCCTTTCAACATGCCTAATCTGTAT
CAGAAGTTGGAGAGTGATCCCAGGACAAGGACACTACTCAGTGATCCTACCTACCGGGAGCTGATAGAGCAGCTA
CGAAACAAGCCTTCTGACCTGGGCACGAAACTACAAGATCCCGGATCATGACCACTCTCAGCGTCCTCCTTGGG
GTGATCTGGGCAGTATGGATGAGGAGGAAGAGATTGCAACACCTCCACCACCACCCCTCCCAAAAAGGAGACC
AAGCCAGAGCCAATGGAAGAAGATCTTCCAGAGAATAAGAAGCAGGCACTGAAAGAAAAAGAGCTGGGGAACGAT
GCCTACAAGAAGAAAGACTTTGACACAGCCTTGAAGCATTACGACAAAGCCAAGGAGCTGGACCCCACTAACATG
ACTTACATTACCAATCAAGCAGCGGTATACTTTGAAAAGGGCGACTACAATAAGTGCCGGGAGCTTTGTGAGAAG
GCCATTGAAGTGGGGAGAGAAAACCGAGAAGACTATCGACAGATTGCCAAAGCATATGCTCGAATTGGCAACTCC
TACTTCAAAGAAAGAAAGTACAAGGATGCCATCCATTTCTATAACAAGTCTCTGGCAGAGCACCGAACCCAGAT
GTGCTCAAGAAATGCCAGCAGG

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: **FIGURE 3261**

GGCACGAGGGCACGTCGGCCCTGCCTCCCGGACCACCCTGCGGGGCGCACCA~~CC~~GATCTGGGGTGCGGGGCTCGG
CCTCCCTGCGCTCCTGGCTGACGGTGTGACCTTGGGACCGAGACGTGCAGCTGTCCAAGGCTCTGTCCTATGCCC
TGCGCCATGGGGCCTTGAAGCTGGGGCTTCCCATGGGAGCTGATGGCTTCGTGCCCCCTGGGCACCCTCCTGCAGT
TGCCCCAGTTCGCGGCTTCTCTGCTGAAGATGTGCAGCGCGTGGTGGACACCAATAGGAAGCAGCGGTTCGCCC
TGCAGCTGGGCGATCCCAGCACTGGCCTTCTCATCCGGGCCAACCCAGGGCCATTCCCTGCAGGTACCTAAGTTGG
AGCTGATGCCCCCTGGAGACACCGCAGGCCCTGCCCCCGATGCTAGTCCATGGTACATTCTGGAAGCACTGGCCAT
CCATCCTACTCAAAGGCCTGTCTGCCAGGGAAGGACGCACATTACCTGGCCCCAGGACTGCCTGGAGACCCCG
GTATCATCAGTGGCATGCGGTCCCATTGTGAAATAGCTGTGTTCATCGATGGACCCCTGGCTCTGGCAGATGGAA
TACCCTTCTTCGCTCTGCCAATGGGGTGATTCTGACTCCAGGGAATACTGATGGCTTCCTCCTTCCCAAGTACT
TCAAGGAGGCCCTGCAGCTACGCCCTACCCGAAAGCCCCCTTTCCTTGGCTGGTGATGAAGAGACAGAGTGTGAGA
GTAGCCCCAAGCACAGCTCCAGAGAAAGGAGGAGGATCCAACAATTAAAATATTAATTTATAAAAAAGAAATTTTA
AAAAGTAACAAGAAAGAACTCGTTTGAAACCATGTTTCATCATCCTGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3262

MGADGFVPLGTLLQLPQFRGFS AEDVQRVVD TNRKQRFALQLGDPSTGLLIRANQGHSLQVPKLELMPLLETPQAL
PPMLVHGTFWKHWPSILLKGLSCQGRTHIHLAPGLPGDPGIISGMRSHCEIAVFIDGPLALADGIPFFRSANGVI
LTPGNTDGFLLPKYFKEALQLRPTRKPLSLAGDEETECQSSPKHSSRERRRIQQ

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FIGURE 3263

AGACAGACCCCGTGC GGCTGACACAGCTGTATGAGCAGGCCCGGTGGGACCTGCTGCTGGAGGAGATTGACTGCA
CCGAGGAGGAGATGATGGTGT TTGCCGCCCTGCAGTACCACATCAACAAGCTGTCCCAGAGCGGGGAGGTGGGGG
AGCCGGCTGGCACAGACCCAGGGCTGGACGACCTGGATGTGGCCCTGAGCAACCTGGAGGTGAAGCTGGAGGGGT
CGGGCGCCACAGATGTGCTGGACAGCCTCACCACCATCCCAGAGCTCAAGGACCATCTCCGAATCTTTCGGCCCC
GGAAGCTGACCCTGAAGGGCTACCGCCAACACTGGGTGGTGTTC AAGGAGACCACACTGTCTACTACAAGAGCC
AGGACGAGGGCCCTGGGGACCCCATTCAGCAGCTCAACCTCAAGGGCTGTGAGGTGGTTCCCGATGTTAACGTCT
CCGGCCAGAAGTTCTGCATTAACTCCTAGTGCCCTCCCCTGAGGGCATGAGTGAGATCTACCTGCGGTGCCAGG
ATGAGCAGCAGTATGCCCCGCTGGATGGCTGGCTGCCGCCCTGGCCTCCAAAGGCCGCACCATGGCCGACAGCAGCT
ACACCAGCGAGGTGCAGGCCATCCTGGCCTTCCTCAGCCTGCAGCGCACGGGCAGTGGGGGCCCCGGGCAACCACC
CCCACGGCCCTGATGCCTCTGCCGAGGGCCTCAACCCCTACGGCCTCGTTGCCCCCGTTTCCAGCGAAAGTTCA
AGGCCAAGCAGCTCACCCACGGATCCTGGAAGCCCACCAGAATGTGGCCCAAGTTGTCGCTGGCAGAGGCCCAGC
TGCGCTTCATCCAGGCCTGGCAGTCCCTGCCGACTTCGGCATCTCCTATGTCATGGTCAGGTTCAAGGGCAGCA
GGAAAGACGAGATCCTGGGCATCGCCAACAACCGACTGATCCGCATCGACTTGGCCGTGGGCGACGTGGTCAAGA
CCTGGCGTTTTAGCAACATGCGCCAGTGGAAATGTCAACTGGGACATCCGGCAGGTGGCCATCGAGTTTGATGAAC
ACATCAATGTGGCCTTCAGCTGCGTGTCTGCCAGCTGCCGAATTGTACACGAGTATATCGGGGGCTACATTTTCC
TGTCGACGCGGGAGCGGGCCCGTGGGGAGGAGCTGGATGAAGACCTCTTCCTGCAGCTCACCGGGGGCCATGAGG
CCTTCTGAGGGCTGTCTGATTGCCCTGCCCTGCTCACCACCTGTCACAGCCACTCCCAAGCCACACCCACAGG
GGCTCACTGCCCCACACCCGCTCCAGGCAGGCACCCAGCTGGGCATTTACCTGCTGTCACTGACTTTGTGCAGG
CCAAGGACCTGGCAGGGCCAGACGCTGTACCATCACCCAGGCCAAGGATGGGGGTGGGGGTCCCTGAGCTCATGT
GGTGCCCCCTTTCCTTGTCTGAGTGGCTGAGGCTGATACCCCTGACCTATCTGCAGTCCCCCAGCACACAAGGAA
GACCAGATGTAGCTACAGGATGATGAAACATGGTTTCAAACGAGTTCTTTCTTGTTACTTTTTAAATTTCTTTT
TTATAAATTAATATTTTATTGTTGG

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FIGURE 3264

GGCTACGGCTGACCGTTTTTTGTGGTGTACTCCGTGCCATCATGTCCGTCCCTGACGCCGCTGCTGCTGCGGGGCT
TGACAGGCTCGGCCCGGCGGCTCCCAGTGCCGCGCGCCAAGATCCATTTCGTTGCCGCCGGAGGGGAAGCTTGGA
TCATGGAATTGGCCGTTGGGCTTACCTCCTGCTTCGTGACCTTCCTCCTGCCAGCGGGCTGGATCCTGTCACACC
TGGAGACCTACAGGAGGCCAGAGTGAAGGGGTCCGTTCTGTCCCTCACACTGTGACCTGACCAGCCCCACCGGCC
CATCCTGGTCATGTTACTGCATTTGTGGCCGGCCTCCCCTGGATCATGTCATTCAATCCAGTCACCTCTTCTGC
AATCATGACCTCTTGATGTCTCCATGGTGACCTCCTTGGGGGTCACTGACCCTGCTTGGTGGGGTCCCCCTTGTA
ACAATAAATCTATTTAACTTT

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FIGURE 3265

MSVLTPLLLRGLTGSARRLPVPRAKIHSLPPEGKLGIMELAVGLTSCFVTFLLPAGWILSHLETYRRPE

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FIGURE 3266

AATTGGCAACCCGGAAGCGGTTCGGTAGTGCGGCGCTGTTTAAAGATGGCGGCGGAGGAACCTCAGCAGCAGAAGC
AGGAGCCGCTGGGCAGCGACTCCGAAGGTGTTAACTGTCTGGCCTATGATGAAGCCATCATGGCTCAGCAGGACC
GAATTCAGCAAGAGATTGCTGTGCAGAACCTCTGGTGTGAGAGCGGCTGGAGCTCTCGGTCTATACAAGGAGT
ATGCTGAAGATGACAACATCTATCAACAGAAGATCAAGGACCTCCACAAAAAGTACTCGTACATCCGCAAGACCA
GGCCTGACGGCAACTGTTTCTATCGGGCTTTTCGGATTCTCCCACTTGGAGGCACTGCTGGATGACAGCAAGGAGT
TGCAGCGGTTCAAGGCTGTGTCTGCCAAGAGCAAGGAAGACCTGGTGTCCCAGGGCTTCACTGAATTCACAATTG
AGGATTTCCACAACACGTTTCATGGACCTGATTGAGCAGGTGGAGAGGCAGACCTCTGTGCGCGACCTGCTGGCCT
CCTTCAATGACCAGAGCACCTCCGACTACCTTGTGGTCTACCTGCGGCTGCTCACCTCGGGCTACCTGCAGCGCG
AGAGCAAGTTCTTCGAGCATTTCATCGAGGGTGGACGGACTGTCAAGGAGTTCTGCCAGCAGGAGGTGGAGCCCA
TGTGCAAGGAGAGCGACCACATCCACATCATTGCGCTGGCCCAGGCCCTCAGCGTGTCCATCCAGGTGGAGTACA
TGGACCGCGCGGAGGGCGGCACCAATCCGCACATCTTCCCTGAGGGCTCCGAGCCCAAGGTCTACCTTCTCT
ACCGGCCTGGACACTACGATATCCTCTACAAATAGGGCTGGCTCCAGCCCGCTGCTGCCCTGCTGCCCCCTCTG
CCAGGCGCTAGACATGTACAGAGGTTTTTCTGTGGTTGTAAATGGTTCCTATTTACCCCCCTTCTTCTGTACAT
GACCCCCCCCCATGTTTTATTAAAGGGGGTGCTGGTGGTGAGCCGTGTGTGCGTGTCCCTGCTCTGCTGCCCCGCC
TGGCTGCTCTGTCTGCTGCCCCCTCCCCCAGGTGGGTCCCCCTGCTTTTACCTATCTACTCCTGAGCTTCCCC
AACAGGAGCAGGTTTGAGGGGCCAGGCCTCTTGGAGGCCCTCCTGCTTCGTTGGGTCTGCTTCCCTTCCCTTCT
TAGCTGGCTCAGGGGCTTCTATGGGATCCTGGAAGTTCCTTAGGGACTTGCCCAGGGTCCCAGGGCCACCCACAC
TTCATCTGCTCCCTCATAGGCCCCACCTCCACGTCCCGGCTGGGCCCCAGACCCAGCTTCTTGCCCTCCACCGG
GAGTCTGCATGGTTGGGAGTCTTGGGTGGAGGGGCCTTGTGAGGCTGGACCGGCTCAGGGCAGGTGGAGGAGC
TGGGCCTCCCACAGGGTGCCCGGCAAGTGCCATCCTGGTGGGGGAGGGCAGCCTTCAAACGTGTGGGGTCTACAG
TCCTCAGGTCTAGGCAGGGCAGCCGTTCTCCACCTCCCCATCCGCCCCAGGCCCCCTGCCTGTGCCTGCCTTGC
ACCCCTCTGCTTGGGCCACGGTGTCTCTGCATTGCCGTGCTTTTGCCTTACCTCTTTTCTTCCCCGCCCCCT
GCACATTCGGGGTCTCAGCCCCCAGGCTGTGAGCTCCTTGGGGGCAGGCCCTCAATAAAATGTGAACTGCTGCTGC
CGCCAAAAAAAAAAAAAAAAAAAA

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FIGURE 3267

MAAEEPQQKQEPLGSDSEGVNCLAYDEAIMAQQDRIQQEIAVQNPLVSERLELSVLYKEYAEDDNIYQQKIKDL
HKKYSYIRKTRPDGNCFYRAFGFSHLEALLDDSKELQRFKAVSAKSKEDLVSQGFTEFTIEDFHNTFMDLIEQVE
RQTSVADLLASFNDQSTSDYLVVYLRLLTSGYLQRESKFFEHFIEGGRTVKEFCQQEVEPMCKESDHIHIALAQ
ALSVSIQVEYMDRGEGETTNPHIFPEGSEPKVYLLYRPGHYDILYK

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FIGURE 3268

AGAGTGGGCGTCTGGCGGGGTCCGCAGTTTCAGCAGAGCCGTGCAGCCATGGCCCCAATCAAGGTGGGAGATGCC
ATCCCAGCAGTGGAGGTGTTTGAAGGGGAGCCAGGGAACAAGGTGAACCTGGCAGAGCTGTTCAAGGGCAAGAAG
GGTGTGCTGTTTGGAGTTCCTGGGGCCTTCACCCCTGGATGTTCCAAGACACACCTGCCAGGGTTTGTGGAGCAG
GCTGAGGCTCTGAAGGCCAAGGGAGTCCAGGTGGTGGCCTGTCTGAGTGTTAATGATGCCTTTGTGACTGGCGAG
TGGGGCCGAGCCCACAAGGCGGAAGGCAAGGTTCTGGCTCCTGGCTGATCCCACTGGGGCCTTTGGGAAGGAGACA
GACTTATTACTAGATGATTGCTGGTGTCCATCTTTGGGAATCGACGTCTCAAGAGGTTCTCCATGGTGGTACAG
GATGGCATAGTGAAGGCCCTGAATGTGGAACCAGATGGCACAGGCCTCACCTGCAGCCTGGCACCCAATATCATC
TCACAGCTCTGAGGCCCTGGGCCAGATTACTTCCTCCACCCCTCCCTATCTCACCTGCCAGCCCTGTGCTGGGG
CCCTGCAATTGGAATGTTGGCCAGATTTCTGCAATAAACACTTGTGGTTTGCGG

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FIGURE 3269

AAATGAAGTGCGCGCTGCGACACCTCCAGCCCACCGAACTCCGCCGCCATTTCCTCGCTTGGCCTAACGGTTCCG
GCCAATCCCAGCGCGCATCAAGAAGGACTGAGGCTCCGCCAATCGGAGGCCGCCGATTTCGACCCCTTCGCCTCGG
CCCGGCCCAATCCAGGCCCGGCCCGCCGCCCGCCCGGCCCGGCCCGGCCCGCGGTGCCCTCTCTCCTCCCTCTTTGTGC
GTCTCGCGCCGCGCGCCGCCCGCGCTGAGAGGACGGGCTCCGCGCGCTCCGGCAGCGCATTCGGGTCCCTCCC
CCCGGGAGGCTTGCGAAGGAGAAGCCGCCGCAGAGGAAAAGCAGGTGCCGGTGCCTGTCCCCGGGGGCGCCATGG
CGACCGGAGCGAACGCCACGCCGTTGGACTTCCCAAGTAAGAAGCGGAAGAGGAGCCGCTGGAACCAAGACACAA
TGGAACAGAAGACAGTGATTCCAGGAATGCCTACAGTTATTCCCCCTGGACTTACTCGAGAACAAGAAAGAGCTT
ATATAGTGCAACTGCAGATAGAAGACCTGACTCGTAAACTGCGCACAGGAGACCTGGGCATCCCCCTAACCCCTG
AGGACAGGTCCCTTCCCTGAGCCCATCTACAATAGCGAGGGGAAGCGGCTTAACACCCGAGAGTTCCGCACCC
GCAAAAAGCTGGAAGAGGAGCGGCACAACCTCATCACAGAGATGGTTGCACTCAATCCGGATTTCAAGCCACCTG
CAGATTACAAACCTCCAGCAACACGTGTGAGTGATAAAGTCATGATTCCACAAGATGAGTACCCAGAAATCAACT
TTGTGGGGCTGCTCATCGGGCCCAGAGGGAACACCCTGAAGAACATAGAGAAGGAGTGCAATGCCAAGATTATGA
TCCGGGGGAAAGGGTCTGTGAAAGAAGGGAAGGTTGGGCGCAAAGATGGCCAGATGTTGCCAGGAGAAGATGAGC
CACTTCATGCCCTGGTTACTGCCAATACAATGGAGAACGTCAAAAAGGCAGTGGAACAGATAAGAAACATCCTGA
AGCAGGGTATCGAGACTCCAGAGGACCAGAATGATCTACGGAAGATGCAGCTTCGGGAGTTGGCTCGCTTAAATG
GGACCCCTTCGGGAAGACGATAACAGGATCTTAAGACCCTGGCAGAGCTCAGAGACCCGCAGCATTACCAACACCA
CAGTGTGTACCAAGTGTGGAGGGGCTGGCCACATTGCTTCAGACTGTAAATTCCAAAGGCCTGGTGATCCTCAGT
CAGCTCAGGATAAAGCACGGATGGATAAAGAATATTTGTCCCTCATGGCTGAAC TGGGTGAAGCACCTGTCCCAG
CATCTGTGGGCTCCACCTCTGGGCCTGCCACCACACCCCTGGCCAGCGCACCTCGTCCTGCTGCTCCCGCCAACA
ACCCACCTCCACCGTCTCTCATGTCTACCACCCAGAGCCGCCACCCCTGGATGAATTCTGGCCCTTCAGAGAGTC
GGCCCTACCACGGCATGCATGGAGGTGGTCTGGTGGGCCCGGAGGTGGCCCCACAGCTTCCCACACCCATTAC
CCAGCCTGCAGGTTGGGCATGGTGGACATCCCATGCAGCACAAACCCCAATGGACCCCCACCCCTTGGATGCAGC
CACCACCACCACCGATGAACCAGGGCCCCACCCCTCCTGGGCACCATGGCCCTCCTCCAATGGATCAGTACCTGG
GAAGTACGCCTGTGGGCTCTGGGGTCTATCGCCTGCATCAAGGAAAAGGTATGATGCCGCCACCACCTATGGGCA
TGATGCCGCCGCCGCCGCCGCTCCAGTGGGCAGCCCCACCCCTCCCTCTGGTCTCTTCCCCCATGGCAAC
AACAGCAGCAGCAGCCTCCGCCACCCCTCCGCCCAGCAGCAGTATGGCTTCCAGTACCCCTTGCCATGGCAGC
AAAATACGACGACTACCACCACGAGCGCTGGCACAGGGTCCATCCCGCCATGGCAACAGCAGCAGGCGGCTGCCG
CAGCTTCTCCAGGAGCCCCCTCAGATGCAAGGCAACCCCACTATGGTGCCCTGCCCCCCGGGGTCCAGCCGCCCTC
TGCCGCTGGGGCCCCCTCCCCCTCCGCCCGTAGCATCGAGTGTCTTCTTTGTCTTCTTCTCTCCTCACCCAAC
TCCCTTTGCCTCTCCCCAAACCGGGCGCCAGGATCCCTCCCCGCGGCGGCGATGGCCCCGAGCCATGAGAGTGAG
GACTTTCGCGCCCATTTGGTGACCTTCCAGGCAGACAGCCTCAGCAACGCCCTGGTGACAGGATGGTTCCGGC
AAAGCAGCCTGAGTTATTTTGTGGACGGAATCGGAACACGCTGGCTCCATATCGTGAAATTTTATTAAATTTT
TTCTTTTCTCTTGTACTTCTTTATCTTTTCTTTCTTCAGACTCCGTCCAAGGAGATGCTCTCCCCGGTCTTC
TGCTGCAATTTAGATTCCTTCCCTTCTCTCCAGTTCTCCTTCCCTTACCAAGGAGAGGGGAGCAATGGTTTTG
GGCAAGGGCTTTGGCCATTCATGTCAAGCTGGTTGTGGGTTTTTCAAGGTGCCATAGCCACCCCAATATGTTT
GTTTAAAGCGTGGGGTTTTTAAATCTCTGCCACCCTTGTCAGGGAGTCTTGTAAGTTGCCGAGGGTAGGTTCA
TCTCCAGGTTTCGGGATCCCATCCGTCTTGCGCATCTGCCAGCAGTGGGTGGGCAGCCTGAGCTCCCTCGGGC
TCGCTGCCAGCCTGGAGTTCTTCTGTGCTCCTTGATCACCTGAGCTGCCTCAGATTCCATTTGGTCTCTCCT
TCCTGGAAGGCTTCCTTTTATGTTTTTAAATCCCAAATGTCTGAATGTTTTGCAGTGTGTAGGGGTTTGAGC
CCCTTGTTCAATCTCCTTCTTTTCTCCCGCTTCCCTCTCCATGAAGTGATTCTGTTGACAATAATGTATACT
GCGCGTCTCTTCACTGGTTTATCTGCAGAAATTTCTCTGGGCTTTTTTCGGTGTTAGATTCAACACTGCGCTAA
AGCGGGGATGTTCCATTGAATAAAAGAGCAGTGTGGTTTTCTGGG

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FIGURE 3270

GCGCCGGGCCATGGCGCTGCTGCGGGATGTGTGCTGCAGGACCCGCGGGACCGCTTCGAGCTGCTGCAGCGCGT
GGGGGCCGGGACCTATGGCGACGTCTACAAGGCCCGGACACGGTCACGTCCGAACCTGGCCGCCGTGAAGATAGT
CAAGCTAGACCCAGGGGACGACATCAGTCCCTCCAGCAGGAAATCACCATCCTGCGTGAGTGCCGCCACCCCAA
TGTGGTGGCCTACATTGGCAGCTACCTCAGGAATGACCGCTTGTGGATCTGCATGGAGTTCTGCGGAGGGGGCTC
CCTGCAGGAGATTTACCATGCCACTGGGCCCCCTGGAGGAGCGGCAGATTGCCTACGTCTGCCGAGAGGCACTGAA
GGGGCTCCACCACCTGCATTCTCAGGGGAAGATCCACAGAGACATCAAGGGAGCCAACCTTCTCCTCACTCTCCA
GGGAGATGTCAAACCTGGCTGACTTTGGGGTGTGAGGCGAGCTGACAGCGTCTGTGGCCAAGAGGAGGTCTTTTCA
TGGGACTCCCTACTGGATGGCTCCCGAGGTGGCTGCTGTGGAGCGCAAAGGTGGCTACAATGAGCTATGTGACGT
CTGGGCCCTGGGCATCACTGCCATTGAGCTGGGCGAGCTGCAGCCCCCTCTGTTCCACCTGCACCCCATGAGGGC
CCTGATGCTCATGTGGAAGAGCAGCTTCCAGCCGCCCAAACCTGAGAGATAAGACTCGCTGGACCCAGAATTTCCA
CCACTTTCTCAAACCTGGCCCTGACCAAGAATCCTAAGAAGAGGGCCGACAGCAGAGAAGCTCCTGCAGCACCCGT
CACGACTCAGCAGCTCCCTCGGGCCCTCCTCACACAGCTGCTGGACAAAGCCAGTGACCCCTCATCTGGGGACCCC
CTCCCCTGAGGACTGTGAGCTGGAGACCTATGACATGTTTCCAGACACCAATCACTCCCGGGGGCAGCACGGCCC
AGCCGAGAGGACCCCCCTCGGAGATCCAGTTTACCAGGTGAAATTTGGCGCCCCACGCAGGAAGGAAACTGACCC
ACTGAATGAGCCGTGGGAGGAAGAGTGGACACTACTGGGAAAGGAAGAGTTGAGTGGGAGCCTGCTGCAGTCGGT
CCAGGAGGCCCTGGAGGAAAGGAGTCTGACTATTGGTTCAGCCTCAGAATTCAGGAGCTGGACTCCCCAGACGA
TACCATGGGAACCATCAAGCGGGCCCCGTTTCTAGGGCCACTCCCCACTGACCCCTCCAGCAGAGGAGCCTCTGTC
CAGTCCCCCAGGAACCTGCCCCACCTCCTTCAGGCCCAACAGCTCCCCACTGCTGCCACGGCCTGGGCCAC
CATGAAGCAGCGGGAGGATCCTGAGAGGTCACTGCCACGGGCTCCCCCAACTCCCAAGGTGCATATGGGCGC
CTGCTTCTCCAAGGTCTTCAATGGCTGCCCCCTGCGGATCCACGCTGCTGTACCTGGATTACCCCTGTTACTCG
GGACAGTTCCTGGTGGTAGGGGCGGAGGAAGGCATCTACACACTCAACCTGCATGAACCTGCATGAGGATACGCT
GGAGAAGCTGATTTACATCGCTGCTCCTGGCTCTACTGCGTGAACAACGTGCTGCTGTCACTCTCAGGGAAATC
CACGCACATCTGGGCCCATGACCTCCCAGGCCTGTTTGAGCAGCGGAGGCTACAGCAACAGGTTCCCTCTCCAT
CCCCACCAACCGCCTCACCCAGCGCATCATCCCCAGGCGCTTTGCTCTGTCCACCAAGATTCTTGACACCAAAGG
CTGCTTGCAGTGTCGTGTGGTGCGGAACCCCTACACGGGTGCCACCTTCCTGCTGGCCGCCCTGCCACCGCCT
GCTCCTGCTGCAGTGGTATGAGCCGCTGCAGAAGTTTCTGCTGCTGAAGAACTTCTCCAGCCCTCTGCCAGCCC
AGCTGGGATGCTGGAGCCGCTGGTGGTGGATGGGAAGGAGCTGCCGCGAGGTGTGTGTTGGGGCCGAGGGGCCTGA
GGGGCCCGGCTGCCGCGTCTGTTCCATGTCTGCCCCCTGGAGGCTGGCCTGACGCCCGACATCCTCATCCCACC
TGAGGGGATCCCAGGCTCGGCCCAGCAGGTGATCCAGGTGGACAGGGACACAATCCTAGTCAGCTTTGAACGCTG
TGTGAGGATTGTCAACATGCAGGGCGAGCCCACGGCCACACTGGCACCTGAGCTGACCTTTGATTTCCCCATCGA
GACTGTGGTGTGCTGCAGGACAGTGTGCTGGCCTTCTGGAGCCATGGGATGCAAGGCCGAAGCCTGGATACCAA
TGAGGTGACCCAGGAGATCACAGATGAAACAAGGATCTTCCGAGTGCTTGGGGCCACAGAGACATCATCTGGA
GAGCATTCCCACTGACAACCCAGAGGCGCACAGCAACCTCTACATCCTCACGGGCCACCAGAGCCTACTAAGA
GCAGCGGGCCTGTCCAGGGGCTCCCCGCCCCACCCACGCCTTAGCTGCAGGCCCTTTTGGGCAAAGGGGCCCAT
CCTAGACCAGAGGAGCCAGGCCCTGGCCCTGCTGGGGCTGAAGGTGAGAAGTAATCCTGAGAAATGTTTCAGGC
CTGGGGAGGGAGGGGAGCCCCGACGCCTCTGCAATAACTGGACCAGGGGGAGCTGCTGTCACTCCCCATCCCC
GAGGCAGCCCAGTCCCTAGTGCCCAAGGCAGGGACCCTGGGCCTGGGCCATCCATTCCATTTTGTTCACATTTT
CTTTCTACTCTTTCTGCCAAGAGCCTGCCCTGCATTTGTCTGGGAAACACGGTATTTAAGAGAGAACTATATT
GGTATTAAAGCTGGTTTGT

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FIGURE 3271

GGCACCAGTCGGAGGGGCGGGGCTGGGAGGGGCTCCTCCCTACCGCCCCAATTCCGCCCTGCCCCGCGCGGG
GGCGCTAGCCGCCACTGAGGGACCGACCCATAAAGGCCGCTCCGCGAGGGGTGCGCAGCATTTCGGCAGAGGGCG
CTTCGACGGGCTGGGCTGTGCGCCTGCGCAGTGTGGGTGCGTCCCATTCCCTGCCCCGGCCGGCCCCGCTCGG
CTCCGCACCCTCGCCCCGCTCTCAGCCGCCGCTCTGCCCCGAGCAGCCAGCCCCGTGTCCGGCAGTATGTTTCA
CTGGGTGAGCAAGGATGCCCCGCCAAGAAGGAGCCGGAGCTCTTCAGACGGTGGCTGAGGGGCTGCGGCAGCT
GTACGCGCAGAAGCTGCTACCCCTGGAGGAGCACTACCGCTTCACGAGTTCCTACTCGCCCCGCTGGAGGACGC
TGACTTCGACAACAAGCCTATGGTGCTCCTCGTGGGGCAGTACAGCACGGGCAAGACCACCTTCATCCGACACCT
GATCGAGCAGGACTTCCCGGGGATGCGCATCGGGCCCGAGCCACCACCGACTCCTTCATCGCCGTGATGCACGG
CCCCACTGAGGGCGTGGTGCCGGGCAACGCGCTCGTGGTGGACCCGCGGCGCCCTTCCGCAAGCTCAACGCGTT
TGGCAACGCTTTCTCAACAGGTTTATGTGTGCCAGCTGCCAACCCCGTCTGGACAGCATCAGCATCATCGA
CACCCCCGGGATCCTGTCTGGAGAGAAGCAGCGGATCAGCAGAGGCTATGACTTTGACCGCTCCTGGAGTGGTT
CGCGGAGCGTGTGGACCGCATCATCCTGCTCTTCGACGCCACACAAGCTGGACATCTCCGATGAGTTCTCGGAAGT
GATCAAGGCTCTGAAGAACCATGAGGACAAGATCCGCGTGGTGTGAACAAGGCAGACCAGATCGAGACGCAGCA
GCTGATGCGGGGTACGGGGCCCTCATGTGGTCCCTGGGCAAGATCATCAACACCCCGAGGTGGTCAGGGTCTA
CATCGGCTCCTTCTGGTCCCACCCGCTCCTCATCCCCGACAACCGCAAGCTCTTTGAGGCCGAGGAGCAGGACCT
CTTCAAGGACATCCAGTCACTGCCCCGAAACGCCGCCCTCAGGAAGCTCAATGACCTGATCAAGCGGGCACGGCT
GGCCAAGGTTACGCCTACATCATCAGCTCCCTCAAGAAAGAGATGCCCAATGTCTTTGGTAAAGAGAGCAAAAA
GAAAGAGCTGGTGAACAACCTCGGAGAGATCTACCAGAAGATTGAGCGCGAGCACCAGATCTCCCCTGGGGACTT
CCCGAGCCTCCGCAAGATGCAGGAACCTCTGCAGACCCAGGACTTCAGCAAGTTCCAGGCGCTGAAGCCCAAGCT
GCTGGACACGGTGGATGACATGCTGGCCAACGACATCGCGCGGCTGATGGTGTGTTGCGGCAGGAGGAGTCCCT
GATGCCTTCCAGGTGGTCAAGGGCGGCGCCTTTGACGGCACCATGAACGGGCGGTTTCGGGCACGGCTACGGCGA
GGGGGCCGGCGAGGGCATCGACGACGTGGAGTGGGTGGGCAAGGACAAGCCCACCTACGACGAGATCTTCTA
CACGCTGTCCCTGTCAACGGCAAGATCACGGGCGCCAACGCCAAGAAGGAGATGGTGAAGTCCAAGCTCCCCAA
CACCGTGCTAGGGAAGATCTGGAAGCTGGCCGACGTGGACAAGGACGGGCTGCTGGACGACGAGGAGTTCGCGCT
GGCCAACCACCTCATCAAGGTCAAGCTGGAGGGCCACGAGCTGCCTGCCGACCTGCCCCCGCACCTGGTGCCGCC
CTCCTCTGCCCTGGGGCCATTGAGCCCAGCCTCCAGGGCCCGGGCGCGTTTGACGGCCAGTGGCCACTGTCCGGGC
TGTGATGGCACCAAGGCAGGTGGAGCACCAGGTACCACACAGCTGGGCTTCCCACCAGGCTTTCCCGCGGGGGTC
TCAGGGAGCTTCTCCCCAGCGCTGCTCGGAGTCTGCAGGAACCTGGCCTTGTCTCCTTAGCCCGTCACTCCATAC
AGTATTAGGTGAGGATGGATGCGGGCGCTGTCTTGCCGGGAAGTCACTGTTGAAGTTGCAGTGGCTTGTTCACA
CCTGTGGGAAGAGAAGTGAAGACTTCTCCTTGCAATAAAAAGTCTGAAGTGTG

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FIGURE 3272

MFSWVSKDARRKKEPELFQTVAEGLRQLYAQKLLPLEEHYRFHEFHSPALEDADFDNKPMVLLVGQYSTGKTTFI
RHLIEQDFPGMRIGPEPTTDSFIIVMHGPTGVVPGNALVVDPRRPFRKLNAFGNAFLNRFMCAQLPNPVLDSIS
IIDTPGILSGEKQRISRGYDFAAVLEWFAERVDRIILLFDAHKLDISDEFSEVIKALKNHEDKIRVVLNKADQIE
TQQLMRVYGALMWSLGKIINTPEVVRVYIGSFWSHPLLIPDNRKLFEEAEQDLFKDIQSLPRNAALRKLNDLIK
ARLAKVHAYIIISLKKEMPNVFGKESKKKELVNNLGEIYQKIEREHQISPGDFPSLRKMQELLQTQDFSKFQALK
PKLLDTVDDMLANDIARLMVMVRQEESLMP SQVVKGGAFDGTMNGPFGHGYGEGAGEGIDDVEWVVGKDKPTYDE
IFYTLSPVNGKITGANAKKEMVKSCLPNTVLGKIWKLADVDDKGLLDDEEFALANHLIKVKLEGHELPADLP
VPPSSAWGH

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FIGURE 3273A

ACGGGGATCGCCGGCGGGCGGCAAGCGGAGGCGGCCAGGCCCGGCGGTCTCCGAGATGTCACGATGGCTGTGGC
CATGGTCAAACGTGTGTGAAAGAGCGGGTCTGCCGCTACTTGGCTGCACCACTACTTAGGTCACTTCTTCCAAGAGC
ACCTCAGCCTGGACCAGCTCAGCCTCGATCTGTACAAGGGCAGCGTTGCCCTGCGAGACATCCACCTGGAAATCT
GGTCTGTGAACGAGGTGCTGGAGTCAATGGAGTCACCGCTGGAGCTGGTGGAAGGCTTCGTGGGCTCCATCGAGG
TGCCCGTGCCCTGGGCTGCTCTGCTCACCGACCACTGCACAGTGCAGCTGTCCGGCCTCCAGCTCACCTTGACG
CCCGCCGGGCTCCAGCGCCAGGGGCTGCCGACTCAGAGCTGGGCTCATGCATGACCACAAGCCTGCAGCTGG
CCCAGGAGTGTCTGCGGGATGGGCTACCGGAGCCCTCTGAGCCACCACAGCCCCTGGAGGGGCTGGAGATGTTTG
CCCAGACCATGAGACTGTGCTTCGGAGGATCAAAGTGACCTTCTCGGACACTGTCTGTAGGGGTGGAGCACTCTC
CGGGTGATGGGGAACGTGGTGTGGCCGTCGAGGTCCGTGTGCAGAGACTGGAGTACTGTGATGAGGCAGTGCGGG
ACCAAGCCAGGCGCCGCCGGTGGACGTGCATCAGCCGCTGCCTTCTGCACAAGCTGCTGCAGCTGGCAGGGG
TCCGCTGCACTACGAGGAGCTCCCGGCACAGGAAGAGCCTCCAGAGCCCCCTTGAGATCGGCAGCTGCTCAG
GGTACATGGAGCTGATGGTGAAGTTGAAGCAAAATGAGGCCTTCCCTGGCCCCAAGTTGGAGGTGGCGGGACAGC
TGGGTCCCTGCACCTGCTCCTGACCCGAGGCAGCTCCAGCAACTTCAGGAAGTGTCTAGCGCCGTGAGCCTTA
CAGACCACGAGGGCTGGCTGACAAGCTGAACAAGAGCCGCCCGCTAGGTGCCGAAGACCTGTGGCTGATTGAGC
AGGACCTGAACCAGCAGCTGCAGGCAGGGGCACTGGCTGAGCCCTCAGCCAGACCCCTTACCAACCCCTTC
TCAACCTGGATAACACTGACCTCTTCTTCTCCATGGCTGGCCTCACAAGCAGTGTGGCCTCAGCCCTCTCTGAGC
TCTCCCTCTCCGATGTAGACCTGGCCTCCTCTGTGCGCAGCGACATGGCCTCCCGCCGGCTCTCTGCCCAGGCC
ACCCAGCTGGCAAGATGGCCCCCAACCCCTCCTGGACACCATGCGCCCTGACTCGCTGCTGAAGATGACCTTGG
GGGTGTGACCTTGACCTTGCTTCAGACGTCTGCCCCATCTTCCGGACCACCTGACCTCGCCACGCACCTTTTCA
CCGAGTTTGATGCCACCAAGGATGGGCCCTTCGGTTCCCGAGACTTCCATCACCTTCGACCACGCTTCCAGAGGG
CCTGTCCCTGTAGCCATGTTCCGGCTAACGGGCACAGCCGTGCAGCTGTCTGGGAGCTGCGGACGGGCAGTCGGG
GCCGGCGGACAACCAGCATGGAAGTGCACCTTCGGGCAGCTGGAGGTGCTGGAGTGTCTGTGGCCCCGGGGCACCT
CTGAGCCTGAGTACACGGAGATCCTGACCTTTCTGGTACGCTGGGCTCCCAGGCCTCAGCTCGGCCCTGCGCCC
ATCTGCGCCACACACAGATCCTGCGCCGTGTGCCTAAGAGCCGACCCCGCGCTCAGTTGCCTGCCATTGCCACT
CAGAACTGGCCCTGGACCTGGCCAACTTCCAGGCGGACGTGGAGCTGGGGGCCCTGGACCGGTGGCCGCCCTAC
TGCGCCTGGCCACCGTACCTGCTGAGCCTCCAGCCGGCTGCTGACAGAGCCCTGCCGGCGATGGAGCAGCAGA
CGGTATTTCCGGCTCTCTGCACCCCGGGCCACGCTGCGGCTGCGCTTCCCATTGCCGACCTGCGGCCCTGAGCCGG
ACCCCTGGGCGGGCCAGGCCGTGCGGGCTGAGCAGCTTCGGCTGGAGCTGAGTGAGCCCCAGTTCCGGTCAGAGC
TTAGCAGTGGGCTGGTCCCCAGTCCCCACCCACCTGGAACCTCACCTGCTCCGACCTACATGGTATCTATGAAG
ATGGAGGGAAGCCACCTGTCCCTTGCCCTGCGTGTCTCAAAGCCCTGGACCCCAAGAGCACTGGGCGCAAGTACT
TCTGCCCCAGGTAGTGGTGACTGTGAACCCCACTCAGCAGCACACAGTGGGAGGTGGCCCCGGAGAAGGGAG
AGGAACCTGGAGCTGTGAGTGGAGAGTCCCTGTGAGCTGCGGGAACCTGAGCCCTCGCCCTTCTCCTTAAGAGGA
CCATGTATGAGACAGAGGAGATGGTGATCCCTGGAGACCTGAGGAGATGAGGACGTTCCAGAGCCGGACCTGG
CACTGTCCCCTGCAGCCTGGAAGTGTCTGCCCAGTGTCCACATCTTCTGCCAGCAAGGAGGTCTACGAGA
GCATCTACAACAGGATCAACAACGACCTGCTCATGTGGGAGCCTGCAGATCTGCTTCCACCCCGACCCCGCCG
CCCAGCCCTCGGGCTTCCCGGCCCTCAGGCTTCTGGCAGCAGACGCTTAAAGATGTGCAAGTCAGCCTTCAAGC
TGGCCAACTGCTTTGATCTCACCCAGACTCGGACTCGGATGACGAGGATGCCACTTCTTCTCAGTGGGGGCAT
CAGGTGGCCACAGGCCGCTGCCCTGAGGCCCAAGTCTTCACTTGACAGACACCTTCTCTACACTGGTGACAG
TGCTGAAGGGGCGGATCACAGCCCTCTGTGAGACCAAGGATGAGGGTGGGAAGCGGCTGGAGGCTGTGCACGGGG
AGCTGGTGTGAGACATGGAGCAGGTAACCTCTTACGCGTCTCCAGTACTGTGGCCAGCCAGGACTTGGCTACT
TCTGTCTGGAAGCTGAAAAGGCAACACTCTACCACCGAGCGGCCGTGGATGACTACCCGCTGCCAGTCACCTGG
ACCTTCCAGTTTTGCTCCCCGGCTCAGCTGGCCCCAACCATCTACCCATCGGAGGAAGGGGTGACCGAGCGGG
GAGCCTCGGGCCGCAAGGGCCAGGGCCGGGGACCCACATGTTGTCCACTGCTGTGCGCATCCACCTGGACCCCC
ACAAGAATGTGAAGGAGTTCTGGTGACACTGCGGTTGCACAAAGCCACCTTGCGCCACTACATGGCCCTGCCCCG
AGCAGAGCTGGCATTCCAGTTGTTGGAGTTCTAGACGTGCTGGATGACCCTGTGCTGGGCTACCTGCCCCGA
CGGTACATACCATCCTGCACACACACCTGTTCTCCTGCTGTGGACTATAGGCCACTCTACCTCCAGTGCGTG
TCCTCATCACCGCGGAGACCTTCACTCTCTCCAGCAACATCATGAGACCTCCACCTTCTGCTCAGGTTCA
TCCTCGATGACTCCGCTTGTACCTGTCCGACAAGTGTGAGGTGGAGACCTGGACCTGCGGCGAGATTATGTCT

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FIGURE 3273B

GTGTTTTGGATGTTGACCTCTTGGAACCTGTGATTAAACCTGGAAGGGAGCACCGAGGGCAAACCTGAGCCAGC
CACTATTTCGAGCTGCGCTGCTCCAACAATGTGGTACACGTGCACAGCTGTGCCGACTCCTGTGCCCTGCTGGTCA
ACCTGCTCCAGTACGTAATGAGCACAGGCGATCTGCACCCCCACCCCGCCCCCAGCCCCACGGAGATCGCCG
GCCAGAAGCTCTCGGAGAGTCTGCTCTCTGCCCTCGTGCCCCCAGTGAGACGGCCCTCATCAACCAGCGTG
ACCTGGCCGACGCCCTCTTGACACCGAGCGCAGCCTACGGGAGCTGGCCAGCCTTCAGGTGGCCACCTCCCTC
AGGCGTCGCCCATCTCCGTCTACCTATTCCCAGGTGAACGGAGTGGGGCCCCACCCCCTTCACCACCTGTCGGGG
GCCCTGCTGGCAGCTTAGGGTCATGCTCAGAGGAGAAGGAAGATGAAAGGGAAGAGGAGGGCGATGGAGACACC
TGGACAGTGATGAGTTCTGCATCCTTGATGCTCCCGGCCCTGGGCATCCCGCCCCGAGATGGGGAGCCTGTGGTGA
CACAGCTGCATCCCGGCCCATCGTTGTGAGGGACGGTTACTTCTCACGGCCGATCGGCAGCACGGACTTGCTGC
GGGCACCTGCCCATTTCCCAGTGCCAGCACTCGGGTGGTGCTACGTGAGGTCTCCCTCGTCTGGCACCTCTATG
GGGGCCGAGACTTTGGCCCCACCCGGCCACAGGGCAAGAAGTGGCCTCTCAGGTCCCAGGAGCTCCCTTTCC
GCTGCTCTGGCCCCAACCGCCCCAGAATCATGGCGCACGCAGGGGGGCGAGCGGGCGGCAGCACCATGTCTCTCA
TGGAGATCCAGCTGAGCAAGGTAAGCTTCCAGCACGAGGTGTACCCAGCGGAGCCAGCCACAGGCCCTGCGGCC
CCAGCCAGGAGCTGGAGGAGCGACCGCTGTCCCGTCAGGTGTTTCATCGTGCAGGAGCTGGAGGTCCGAGACCGGC
TCGCCTCTCTCCAGATCAACAAGTTCTGTACCTACACACGAGTGAGCGGATGCCGCGACGTGCCACTCTAACA
TGCTACCATCAAAGCGCTGCATGTGGCCCCACTACCAACCTGGGTGGGCCTGAGTGCTGTCTCCGCGTCTCGC
TGATGCCCCTGCGGCTCAATGTGGACCAGGATGCCCTCTTCTTCTCAAGGACTTCTTCACTAGTCTGGTGGCCG
GCATCAACCCCGTGGTCCCAGGGGAGACCTCCGCTGAGGCTCGCCCCGAGACTCGAGCCAGCCAGCAGCCCCC
TGGAAGGGCAGGCCGAAGCGTAGAGACCACTGGTTTCGAGGAGGCCCCAGGAGGTGGACACAGCCCCCTCCCTC
CTGACCAGCAGCCATCTACTTCAGAGAGTTCCGCTTCACGTCTGAGGTCCCCATCTGGCTGGATTACCATGGCA
AGCACGTACGATGGACCAGGTGGGCACTTTTGCTGGCCTCCTCATCGGCCTGGCCCACTCAACTGCTCCGAGC
TGAAGCTAAAGCGGCTCTGTTGCAGGCACGGGCTCCTGGGTGTGGACAAGGTGCTGGGCTATGCCCTCAACGAGT
GGCTGCAGGACATCCGCAAGAACCAGCTGCCCGGCTGCTGGGAGGCGTGGGCCCCATGCACTCGGTTGTCCAGC
TCTTCCAAGGGTTCCGGGACCTGCTGTGGCTGCCATTGAGCAGTACAGGAAGGATGGCCGCTCATGCGGGGGC
TGCAGCGAGGGGCTGCCTCCTTTGGCTCATCCACAGCCTCTGCCGCCCTGGAACCTCAGCAACCGGTTGGTACAGG
CTATCCAGGCCACAGCTGAGACCGTGTATGACATCCTGTCCCCGGCAGCCCCCGTCTCCCGCTCCCTGCAGGATA
AGCGCTCTGCGCGGAGGCTGCGCAGGGGCCAGCAGCCTGCCGACCTGCGGGAGGGTGTGGCCAAGGCCTACGACA
CAGTGCAGAGGGCATCTTGATACAGCTCAGACCATCTGTGACGTGGCATCGCGGGGCCATGAGCAGAAGGGGC
TGACGGGCGCCGTGGGGGGCGTGATCCGCCAGCTGCCCCGACTGTGGTGAAGCCGCTCATCTGGCCACGGAGG
CCACGTCCAGCCTGCTCGGGGGCATGCGCAACCAGATTGTCCCCGACGCCACAGGACCACGCCCTCAAGTGGC
GCTCGACAGTGCCCAAGACTGAGCCTGGGGTGCCCGGCACCCAGAGGGTGCTGCCACCATGCTCCTGAGCCTC
CCAAGAGCTGCAGCCACGGGCCCCGGCCCCGGCCTGGCCCTTCAGGGGATGGCCACTGTGAAGGACGCCTTCCAG
CCTGCCCGTTGCCAATCTGCTGTGAGAGGGGGCCTCCCTGCCTTGGGGCCTTAGCCCTGGCTCTGCACTTTTCC
TCCGGGGAGAAAGGACACTGCCCCCTCCCCGACCTGGGCCACACTGCTGCCTTCTCCAGGACGGAGGCTTTTG
GACCTTCGGACCCCATCCCACTCAGCCAAGTGTCTTTCTGTGTCTGGGGGAGGAGGGGATGATATCCGTGTGGT
TCGATGTATTATTTTAAGCTCCGTGAGTGCGTGGGTGAGTGTCTGCATGAAGTGAATAAACTGCCACCGCC

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FIGURE 3274

MSRWLWPWSNCVKERVCRYLLHHYLGHFFQEHLSLDQLSLDLYKGSVALRDIHLEIWSVNEVLESMESEPLELVEG
FVGSIEVAVPWAALLTDHCTVRVSGQLTLQPRRGPAAGAADSQSWASCMTTSLQLAQECLRDGLPEPSEPPQPL
EGLEMFQTIETVLRRIKVTFLDTVVRVEHSPGDGERGVAVEVRVQRLEYCDEAVRDPSQAPPVDVHQPPAFLHK
LLQLAGVRLHYEELPAQEPPPEPPLQIGSCSGYMELMVKLKQNEAFP GKLEVAGQLGSLHLLLTTPRQLQQLQEL
LSAVSLTDHEGLADKLNKSRPLGAEDLWLEQDLNQQLQAGAVAEPLSPDPLTNPLLNDLNTDLFFSMAGLTSSV
ASALSELSLSDVDLASSVRSDMASRRLSAQAHPAGKMAPNPLD TMRPDSLLKMTLGGVTLTLLQTSAPSSGPPD
LATHFFTEFDATKDGPFGRDFHHLRPRFQRACPCSHVRLTGTAVALSWELRTGSRGRRTTSMEVHFGQLEVEEC
LWPRGTSEPEYTEILTFPGTLGSQASARPCAHLRHTQILRRVPKSRPRRSVACHCHSELALDLANFQADVELGAL
DRLAALLRLATVPAEPPAGLLTEPLPAMEQQTVFRLSAPRATLRLRFPIADLRPEPDWAGQAVRAEQRLRELESE
PQFRSELSSGPGPPVPTHLELTCSDLHGIYEDGGKPPVPCLRVSKALDPKSTGRKYFLPQVVTVNPPSSSTQWE
VAPEKGEELELSVESPCELREPEPSFFSSKRTMYETEEMVIPGDPEEMRTFQSRTLALSRCSLEVILPSVHIFLP
SKEVYESIYNRINNDLLMWEPADLLPTPDPAAPSGFPGPSGFWDHDSFKMCKSAFKLANCFDLTPDSDSDEDAH
FFSVGASGGPQAAAEAPSLHLQSTFSTLVTVLKGRI TALCETKDEGGKRLEAVHGELVLDMEHGTLSVSQYCG
QPGLGYFCLEAEKATLYHRAAVDDYPLPSHLDLPSFAPPAQLAPTIYPSEEGVTERGASGRKGQGRGPHMLSTAV
RIHLDPHKNVKEFLVTLRLHKATLRHYMALPEQSWHSQLEFLDVLDDPVLGYLPPTVITILHTHLFSCSVDRP
LYLPVRVLITAETFTLSSNIIMDTSTFLLRFILDDSA LYSKCEVETL DLRRDYVCVLDVLDLLELVIKTWKGST
EGKLSQPLFELRCSNNVVHVHSCADSCALLVNLLQYVMSTGDLHPPRPSPTEIAGQKLSSESPASLPSCPPVET
ALINQRDLADALDTERSRLRELAQPSGGHLFQASPI SVYLFPGERSGAPPPSPVGGPAGSLGSCSEEKEDERE
EGDGD TLDSEFCILDAPGLGIPPRDGEPPVTQLHPGP I VVRDGYFSRPIGSTDLLRAPAHFPVPSTRVVLREVS
LVWHLYGGRDGFPHPGHRARTGLSGPRSSPSRCSGPNRPQNSWRTQGGSGRQHHLVMEIQLSKVSFQHEVYPAEP
ATGPAAPSQELEERPLSRQVFIVQELEVDRRLASSQINKFLYLHTSERMPRAHSNMLTIKALHVAPTTNLGGPE
CCLRVSLMPLRLNVDQDALFFLKDEFTSLVAGINPVVPGETSAEARPETRAQPSSPLEGQAEVETTSQEAPGG
GHSPSPDQQPIYFREFRFTSEVP IWL DYHGKHVTMDQVGTFAGLLIGLAQLNCSELKLRCCRHGLLGVDKVL
GYALNEWLQDIRKNQLPGLLGGVGPMHSVVQLFQGF RDLLWLP I EQYRKDGRLMRGLQRGAASFGSSTASAALEL
SNRLVQAIQATAETVYDILSPAAPVSRSLQDKRSARRLRGQPADLREGVAKAYDTVREGILDTAQTICDVASR
GHEQKGLTGAVGGVIRQLPPTVVKPLILATEATSSLLGGMNRQIVPDAHKDHALKWRSDSAQD

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FIGURE 3275

AAGGAGAGAGGGAGGGCGGAGGGCGGAGGGGCGGCGGGAGGAGGGCGGGGAGGAGCGCTCTTCCTGGTTGGGCC
TGCCCTGAGCTGCCACCGGAAGCCAGCCTCAGGGACTGCAGCGACCCCCAAACACCCCTCCCCAGGATGTCGG
AGGAGATCATCACGCCGGTGTACTGCACTGGGGTGTAGCCCAAGTGCAGAAGCAGCGGGCCAGGGAGCTGGGCC
TGGGCCGCCATGAGAATGCCATCAAGTACCTGGGCCAGGATTATGAGCAGCTGCGGGTGCATGCTGCAGAGTG
GGACCTCTTCCTGATGAGGCCTCCCCCGGTACCCAGAGCCTGGGTTACAAGGACCTGGGTCCCAATTCTCT
CCAAGACCTATGGCATCAAGTGAAGCGTCCACGGAAGTGTCTGCAAAACCCCAAGTTTATTGTGGATGGAGCTA
CCCGCACAGACATCTGCCAGGGAGCACTGGGGGACTGCTGGCTCTTGCGGCCATCGCCTCCCTCACTCTCAACG
ACACCTCTGCAACGAGTGGTTCCGCACGGCCAGAGCTTCCAGAATGGCTATGCCGGCATCTTCCATTTCAGC
TGTGGCAATTTGGGGAGTGGGTGGACGTGGTCTGGATGACCTGCTGCCCATCAAGGACGGGAAGCTAGTGTTCG
TGCACTCTGCCGAAGGCAACGAGTTCTGGAGCGCCCTGCTTGAGAAGGCCTATGCCAAGGTAAATGGCAGCTACG
AGGCCCTGTACGGGGGAGCACCTCAGAGGGCTTTGAGGACTTCACAGGCGGGGTTACCGAGTGGTACGAGTTGC
GCAAGGCTCCAGTGACCTCTACCAGATCATCTCAAGGCGCTGGAGCGGGGCTCCTGCTGGGCTGCTCCATAGA
CATCTCCAGCGTTCTAGACATGGAGGCCATCACTTTCAAGAAAGTTGGTGAAGGGCCATGCCTACTCTGTGACCGG
GGCCAAGCAGGTGAAGTACCGAGGCCAGGTGGTGAAGCCTGATCCGGATGCGGAACCCCTGGGGCGAGGTGGAGTG
GACGGGAGCCTGGAGCGACAGCTCCTCAGAGTGAACAACGTGGACCCATATGAACGGGACAGCTCCGGGTCAA
GATGGAGGACGGGGAGTTCTGGATGTCAATCCGAGACTTCATGCGGGAGTTACCCGCTGGAGATCTGCAACCT
CACACCCGACGCCCTCAAGAGCCGGACCATCCGCAAAATGGAACACCACACTCTACGAAGGCACCTGGCGGGGGG
GAGCACCGCGGGGGGCTGCCGAAACTACCCAGCCACCTTCTGGGTGAACCCCTCAGTTCAAGATCCGGCTGGATGA
GACGGATGACCCGGACGACTACGGGGACCGGAGTCAGGCTGCAGCTTCGTGCTCGCCCTTATGCAGAAGCACCG
TCGCCGCGAGGCCGCTTCGGCCGCGACATGGAGACTATTGGCTTCGCGGTCTACGAGGTCCCTCCGGAGCTGGTC
GCGAGCCGGCCGTACACTTGAAGCGTGACTTCTTCCTGGCCAATGCGTCTCGGGCGCGCTCAGAGCAGTTTCATCA
ACCTGCGAGAGGTACGACCCCGCTTCGCCCTGCCACCCGGGGAGTATGTGGTGGTGCCCTCCACCTTCGAGCCCA
ACAAGGAGGGGCGACTTCGTGCTGCGCTTCTTCTCAGAGAAGAGTGTGGGACTGTGGAGCTGGATGACCAGATCC
AGGCCAATCTCCCCGATGAGCAAGTGTCTCAGAAGAGGAGATTGACGAGAAGTTCAAGGCCCTCTTCAGGCAGC
TGGCAGGGGAGGACATGGAGATCAGCGTGAAGGAGTTGCGGACAATCCTCAATAGGATCATCAGCAAAACACAAAG
ACCTGCGGACCAAGGGCTTCAGCCTAGAGTCGTGCCGAGCATGGTGAACCTCATGGATCGTGATGGCAATGGGA
AGCTGGGCCTGGTGGAGTTCAACATCCTGTGGAAACCGCATCCGGAATTACCTGTCCATCTTCGGGAAGTTTGACC
TGGACAAGTGGGACAGCATGAGTGCTACGAGATGCGGATGGCCATTGAGTCGGCAGGCTTCAAGCTCAACAAGA
AGCTGTACGAGCTCATCATACCCGCTACTCGGAGCCCGACCTGGCGGTGCACTTTGACAATTTGTTTTGCTGCC
TGGTGGGGCTAGAGACCATGTTCCGATTTTTCAAACTCTGGACACAGATCTGGATGGAGTTGTGACCTTTGACT
TGTTTAAGTGGTTGCAGCTGACCATGTTTGATGAGGCAGGGACTCGGTCCCCCTTGCCGTGCTCCCCCTCCCTCC
TCGTCTGCCAAGCCTCGCCTCCTACCACACCACACCAGGCCACCCAGCTGCAAGTGCCTTCTTGGAGCAGAGA
GGCAGCCTCGTCCCTGTCCCCCTCCTCCCAGCCACCATCGTTTCTGCTCCGGGAGAACTGTGTGGCCCC
TGCCCTGTGCCAGCCATGGGCTCGGGATGGACTCCCTGGGCCCCACCCATTGCCAAGCCAGGAAGGCAGCTTTGCG
TTGTTCTGCTCGGACAGCCCCGGGTTTCCCCAGCATCCTGATGTGTCCCTCTCCCCACTTCAGAGGCCACC
CACTCAGCACCACCGCCCTGGCCTTGCTGCAGACTATAAACTATAAACCCTAGCTCGACACAGTCTGCAGTCCA
GGCGTGTGGAGCCGCTCCCGGCTCGGGGAGGCCCGGGGCTGGGAACGCTGTGCCTTCTGCGCCGAAGCCAA
CGCCCCCTGTCTCTTCCCTGGCCTGCTGCCGACAGGAGCTGCCAGCCTGTGGGCGGTGGCCTTCCCTCCT
TCGCTCCTTTTTTATATTAGTGATTTTAAAGGGGACTCTTCAGGGACTTGTGTACTGGTTATGGGGGTGCCAGAG
GCAC TAGGCTGGGGTGGGAGGTCCCGTGTTCATATAGAGGAACCCCAAATAATAAAAGGCCCCACATCTGTC
TGTG

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FIGURE 3276

GTAGCAGGTAAAGATGGCAGCTACCATGTTCCGGGCTACGCTGCGGGGATGGAGAACCGGTGTCCAGCGGGGCTG
CGGGCTACGGCTGTTGAGCCAGACCCAGGGCCCTCCAGATTACCCAGGTTTGTGGAGTCTGTGGATGAATATCA
GTTTGTGGAGCGCCTGTTACCGGCTACCAGGATCCCAGATCCCCAAAGCATGAACATTATCTACCCCTAGTGG
CTGGCAGCCTCCCAGAGACCCCCACCCAACCTGCCTTACTTTGTACGACGCTCTCGGATGCACAACATCCCCGT
CTACAAGGACATCACGCATGGCAACCGGCAGATGACTGTGATCCGGAAAGTGGAAGGGGACATCTGGGCCCTGCA
GAAAGACGTGGAAGATTTTCTGAGCCCGCTGCTGGGGAAGACACCTGTCAACCAGGTCAATGAGGTGACAGGTAC
CCTACGGATCAAGGGCTACTTTGACCAGGAGCTTAAAGCCTGGCTCTTGAGAAAGGCTTCTGAGGCCAGCCGA
GCAGCCTGCTTGTACGCATGCCCTGTGGATCAAGTCTAGGGGGCCTCAGGAGGAGGGAGGTGGGTGTTGGAGCCC
CTGAGACAGGGGATACAGAACTAGGGCTAAAGGACTTTGGGGTCAGGCCTTGCTTGATAAAGGAGAAAAACAAC
TCTATGTACATGCTGGGGGAGAGTGCCTAATGTGGGAGACCAAATAGGGATCACCAGGCTAATGGGGGGCGTCAG
CAGCTTTCTCTCCCTCCTATCTTGGCCTGTTCTTTTTTGTGTTTTTGAGACGGAGTCTCACTCTGTTGCCAGGGT
GGAGTGAGTGGCATGATCTTGGCTCACTGCAACTTCCACCTCTGGGATCAAGGGATTCTCCTGCCTCAGCCTCT
TGAGTAGCTGGGATTACAGGCGCCACCACCACAGCCTGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCAC
CATGTTGGCCAGGCTGGTCTCAAACCTGACTCGAAGTGATCCGCCCACCTTGGCCTCCCAAAGCGTTGGGATT
ATAGGCATGAGCCATGTGCCTGGTCCACCTTGGCCTGTTTTGTTTTCTTTCTTTGGGCTCAGCAATTCAAATTC
TAGTTGTTATTTGGTGAAGCAGTAGCCCAACCCAGTTTAGGGGAAGGTAGCACAGGGCAGAGCCACTGGGCAC
TTTGTTCCTTGGCCCTCCGAAGCTCACTGTTGCAAATACCCCCAAGCCTTTGCTCTAGGCCAGATCTTGTTTGG
TGCAGGTGATGGAGAACACAGATGACTCGGGCATGGGTCTTGAGATCTTCTGTTCAAAGTACAGTGCTGGCACT
GGGGCACAGAGTGCCACGTTAGCCCCGGGCTCTGATAGAGAGGTAGGAGGCACGTTCTTGGTCACTGTTCCATT
GCAGACCAGACTTGCTGGCCTGACCACAAGGGAGTGGCTGGGAACTCACAGCCAGCATAGGGACATCCCCCTGCA
GCCTTCTGACCTGCAATCAAGGCTGGGGAGGGGTTTGAGGCAGGAATATGCTGACCTTTCACCCTGCCATCCCA
TCCCAACCCCAAGCTCACTAGCCTTCATATATGCCTTATACTTGGAGTCACAGGGGGCCAAAGGCCTGAGACCCAC
CCTGCCCCCAAAGTGGCTAAGACAGCTTTCAGTTTCTGACTCCCCAACTTGGTCTCTGCCCTGAAGCAGGGCACT
GAACTCTGGGCTGCTTCTCTGTGTGTAATAATGGGCACATCTTCTAATCTGTTAATGGTCAGTGGTGTCCCAAG
GATAGTGCTGGCTTCCATGGAACCCCTCACTCCTGGAGATTCCATTCCATTTTCAAGTGTACAGCCACAGCAAGG
AGCCCGACACTGATTTGATCGATTCTGTGACACAAACCCACCAATTGTTAATGCAAGTTTTTATTGGCTGTAT
ATACAATTTAAGCTATTAAAATTTGTACAATATTTACAAATTAAA

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FIGURE 3277

MAATMFRATLRGWRTGVQRCGLRLLSQTQGPPDYPRFVESVDEYQFVERLLPATRIPDPPKHEHYPTPSGWQPP
RDPPPNLPYFVRRSRMHNIPVYKDI THGNRQMTVIRKVEGDIWALQKDVEDFLSPLLGKTPVTQVNEVTGTLRIK
GYFDQELKAWLLEKGF

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FIGURE 3278

GTCCAGGCAGGTGCAGGCGCCGCGGGGCCGGATCCTCCGCGCGGCCGAGTCCATCTCCTGGGAAATGGGGCGGAC
AGTGTTTCCTTGACTGACTATTGTGAGCGCCCTCTCTCTCCGGCGGAGCGGAGACCATGGCCCCCACTCAGGGCC
CCCGGGCCCCGCTGGAATTCGGAGGGCCCCCTGGGCGCCGCGGCTCTGCTACTGCTGCTGCCCGCCACCATGTTCC
ACCTGCTCCTGGCGGCCCGTTCTGGGCCCCGCGCGCTGCTGGGTCCACCCGCGTCCCTGCCGGGGCTGGAGGTGC
TGTGGAGCCACAGGGCGCTGCTGCTGTGGCTCGCCTGGCTCGGCTGCAGGCGGCGCTCTACCTACTGCCGGCGC
GCAAGGTGGCCGAGGGGCAGGAATTGAAGGACAAGAGTCGCCTGCGCTATCCTATTAACGGCTTCCAGGCCCTGG
TGCTGACAGCCCTGTTGGTGGGGCTGGGGATGTCAGCGGGGCTGCCTCTGGGGGCGCTCCCGGAAATGCTCCTGC
CCTTGGCGTTTGTCGCCACCCCTACCGCTTTCATCTTCAGCCTCTTCTCTACATGAAGGCGCAGGTAGCCCCAG
TTTCGGCCCTGGCACCTGGGGGGAACCTCAGGCAATCCGATTTACGACTTTTTCTGGGACGAGAGCTCAACCTC
GTATCTGTTTCTTCGACTTCAAATATTTCTGTGAACCTGCGACCCGGCCTCATCGGCTGGGTCTCATCAACCTGG
CCCTGTTGATGAAGGAGGCAGAGCTTCGAGGCAGTCCCTCACTGGCCATGTGGCTGGTCAATGGCTTCCAGTTGC
TCTACGTGGGTGATGCCCTCTGGCACGAGGAGGCCGTCTCACCACCATGGATATCACACATGACGGGTTTGGCT
TCATGCTGGCGTTTGGGGACATGGCCTGGGTGCCCTTACCTACAGCCTGCAGGCCCAGTTCTGCTGCACCACC
CGCAGCCCTGGGGTTGCCATGGCCTCTGTCTATCTGCCTCATCAATGCTACTGGTTACTACATCTTCCGTGGGG
CGAATTCAGAAAAACACTTCCGAAAGAATCCTTCTGACCCAGAGTGGCTGGGCTTGAGACCATCTCTACAG
CCACAGGGCGGAAACTGCTGGTGTCTGGGTGGTGGGGTATGGTCCGCCATCCCAACTATCTTGGAGACCTCATCA
TGGCTCTGGCTTGGTCTTGGCTGCGGGGTGTACACCTGCTGCCCTACTTCTACCTCCTCTACTTACCGCGC
TGCTGGTGCACCGTGAGGCCCGGGATGAGCGGCAGTGCCTGCAGAAGTACGGCCTGGCCTGGCAGGAGTACTGCC
GGCGTGTGCTTACCGCATCATGCCCTACATCTACTGAAGCGGCTCCACCACCCAGGTGGGGGATGTGCCAC
TCATCCACCAGCACACCAGGACCAGGAGCCTCGACACACTTGGGACTCAAGGGCTTGCACCCACCCAGCCCTG
AGGATGAACAACCTCAGAGAAGAGGTGGTTTAGAGCAAGGAAAAAATGAAACCAGTGACC

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FIGURE 3279

TTCCTTTCCAGCCTCACGCCCCTGGGCTGCAGTTGGAACGATGCGGGCGGCAGCTGCCGCCGGGCCTAGCCCCGGG
GTCTGGACCTGGGGACTCCCCAGAAGGGCCCCGAGGGGGAGGCTCCGGAGCGTCGGCGGAAGGCGCACGGGATGCT
GAAGCTTTACTACGGCCTCTCGGAAGGGGAGGCGGGGACGCCCCGCGGGGCCGACCCCCCTGGACCCGACTGA
TCTGAACGGGGCGCACTTCGACCCGGAAGTTTACCTAGACAAGCTGCGTAGAGAGTGCCTCTGGCCAGTTGAT
GGACAGTGAGACGGACATGGTGCAGCAGATCCGGGCTCTAGACAGCGACATGCAGACCCTGGTCTATGAGAACTA
CAACAAGTTCATCTCAGCCACAGACACCATCCGGAAGATGAAGAAAGATTTCCGGAAGATGGAGGATGAGATGGA
CCGGCTGGCCACCAACATGGCAGTGATCACCAGCTTCAGCGCTCGCATCAGCGCCACGCTGCAGGACCGCCACGA
GCGCATCACCAAGCTGGCAGGGGTCCACGCGCTGCTGCGGAAGCTGCAGTTCTCTTTGAGCTGCCCTCGCGCCT
CACCAAGTGCCTGGAACGGGCGCCTATGGGCGAGCGGTGCGCTACCAGGGCCGCGCGCAGGCCGTGCTGCAGCA
GTACCAACACCTGCCCTCGTTCCGCGCCATCCAGGACGACTGCCAGGTTCATCAGGCCCGCCTGGCCAGCAGCT
GCGGCAGCGCTTTAGGGAGGGCGGCTCAGGCGCCCCGGAGCAGGCAGAGTGCCTGGAGCTGCTGCTGGCCCTGGG
CGAGCCTGCGGAGGAGCTGTCCGAGGAGTTCTTGGCGCACGCCCCGCGGCCGCTGGAGAAGGAGCTGAGAAACCT
GGAGGCCGAGCTGGGGCCCTCACCTCCGGCTCCCGACGTGTTAGAGTTTACCGACCATGGAGGCAGTGGCTTCGT
GGGCGGCCCTTGCCAGGTGGCGGCGGCCTACCAGGAGCTGTTTGGCGGCCAGGGCCAGCAGGTGCCGAGAAGCT
GGCGGCCCTTGCCCCGGCAGCTGGGCGAGCCGCTATTTTGGCGCTGGTGGAGCGGCGGCTGGCGCAGGAGCAGGGTGG
TGGTGACAACCTACTGCTGGTGGCGGCGCTGGACCGCTTCCACCGGCGCTTGGCGGCTCCCGGGGCCCTGCTGGC
CGCTGCCGGGCTCGCAGACGCTGCCACGGAGATCGTGGAACGAGTGGCCCGGAGCGCCTGGGCCACCACTGCA
GGGCTCTCCGGGCGGCCCTTCTGGGCTGCCTGACAGACGTCCGCCAGGCGCTGGCAGCACCTCGCGTGGCTGGGAA
GGAGGGCCCTGGCCTGGCCGAGTTGCTGGCCAATGTGGCCAGCTCCATCCTGAGCCACATTAAGGCCTCTCTGGC
AGCAGTGACACCTTTTACCGCCAAAAGAGGTGTCTTCTCAACAAGCCCTACTTCCGGGGTGAGTTCTGCAGTCA
GGGTGTCCGTGAGGGCCTCATCGTGGGCTTCGTCCACTCTATGTGCCAGACGGCTCAGAGCTTCTGCGACAGCCC
TGGGGAGAAGGGGGGTGCCACACCACCTGCCCTGCTCCTGCTGCTCTCCCGCCTCTGCCTGGACTACGAGACGGC
CACCATCTCTACATCTCACTCTCACTGATGAACAGTTTCTGGTGCAGGATCAGTTCCAGTGACGCCCGTGAG
CACGCTGTGTGAGAGGCCAGGGAAACGGCGCGGGCGGCTGCTGACCCACTACGTGAAGGTGCAGGGCCTGGTCAT
ATCACAGATGCTGCGCAAGAGCGTGGAGACTCGCGACTGGCTCAGCACTCTGGAGCCCCGGAATGTGCGGGCCGT
CATGAAGCGGGTGGTGGAGGATACCACCGCCATCGACGTGCAGGTGGGGCTCCTGTACGAAGAGGGTGTTGCAA
GGCCAGAGCAGCGACTCCAGCAAGAGGACTTCTCCGTGTACAGCAGCTCTCGGCAGCAGGGCCGCTACGCCCC
CAGCTATACCCCCAGTGCCCCGATGGACACCAACCTCTTGAGCAATATCCAGAAGCTATTCTCTGAACGTATTGA
TGTGTTACGCCCTGTGGAGTTCAACAAGGTGTCCGTGCTGACCGGCATCATCAAGATCAGCCTGAAGACGCTGCT
GGAGTGTGTGCGGCTGCGCACCTTTGGGCGCTTCGGGCTGCAGCAGGTGCAAGTGGACTGCCACTTTCTGCAGCT
CTACCTGTGGCGTTTTGTGGCCGACGAAGAACTCGTGCACTTGCTGCTGGACGAAGTGGTGGCCTCTGCTGCCCT
GCGCTGCCAGACCTGTGCCATGGAGCCAGTGTTGAGGTTCATCTGCGAGCGCGGCTAGGCGCAGCCGCT
GCCATGCACCGGTCTGTCCCTGCACCCCATGGCACCCAGGATCTGGTCTCGGTGGTCTTCCCGCAGGCAGGTG
TCAGGACCGGCCTAATAAACATGTGTGGCCTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3280

MAAAAAAGPSPGSGPGDSPEGPEGEAPERRRKAHGMLKLYYGLSEGEAAGRPAGPDPLDPTDLNGAHFDPEVYLD
KLRRECPLAQLMDSETDMVRQIRALDSMQTLVYENYNKFI SATDTIRKMKNDFRKMEDEMDRLATNMAVITDFS
ARISATLQDRHERITKLAGVHALLRKLOFLFELPSRLTKVELGAYGQAVRYQGRAQAVLQQYQHLP SFRAIQDD
CQVI TARLAQQLRQRFREGGSGAPEQAECVELLLLALGEPAEELCEEFLAHARGRLEKELRNLEAELGPSPPAPDV
LEFTDHGGSGFVGGLCQVAAAYQELFAAQGPAGAEKLA AFARQLGSR YFALVERRLAQEQQGGDNSLLVRALDRF
HRRLRAPGALLAAAGLADAATEIVERVARERLGHHLQGLRAAFLGCLTDVRQALAAPRVAGKEGPGLAELLANVA
SSILSHIKASLA AVHLFTAKEVSFSNKP YFRGEFCSQGVREGLIVGFVHSMCQTAQSFCDSPGEKGGATPPALLL
LLSRLCLDYETATISYILTLTDEQFLVQDQFPVTPVSTLCAEARETARRLLTHYVKVQGLVISQMLRKS VETR DW
LSTLEPRNVRAVMKRVVEDTTAIDVQVGLLYEEGVRKAQSSDSSKRTFSVYSSSRQQGRYAPSYTPSAPMDTNLL
SNIQKLFSE RIDVFS PVEFNKVS VLTGI IKISLKTILLECVRLRTFGRFGLQQVQVDCHFLQLYLWRFVADEELVH
LLLDEVVASAALRCPDPVPMEPSVVEVICERG

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FIGURE 3281

GAGGGATAATCGGGGCGGCCGGGGCTGAAGGGAGAGGCGCAGGAGCCCTGGGGAGAGTGGTCCCTGCCCTTCCGC
GCCTCGAGCCATCGCTACCGCCCTTCGGAACCAGTGCAGCGGCCGATCAGTAAACACAGAGACTGGGGATCGATC
ATGGGGCTTTGTAAGTGCCCCAAGAGAAAGGTGACCAACCTGTTCTGCTTCGAACATCGGGTCAACGTCTGCGAG
CACTGCCCTGGTAGCCAATCACGCCAAGTGCATCGTCCAGTCCTACCTGCAATGGCTCCAAGATAGCGACTACAAC
CCCAATTGCCGCTGTGCAACATAACCCCTGGCCAGCCGAGAGACGACCCGCCTTGCTGCTATGATCTCTTTAC
TGGGCTGCCCTCAATGAACGTGCTGCCCAGCTACCCCGAAACACGGCACCTGCCGGCTATCAGTGCCCCAGCTGC
AATGGCCCCATCTTCCCCCAACCAACCTGGCTGGCCCCGTGGCCTCCGCACTGAGAGAGAAGCTGGCCACAGTC
AACTGGGCCCCGGGCAGGACTGGGCTCCCTCTGATCGATGAGGTGGTGAGCCCAGAGCCCGAGCCCTCAACACG
TCTGACTTCTCTGACTGGTCTAGTTTTAATGCCAGCAGTACCCCTGGACCAGAGGAGGTAGACAGCGCCTCTGCT
GCCCCAGCCTTCTACAGCCAGGCCCCCGCCCCAGCTTCCCCAGGCCGGCCCCGAGCAGCACACAGTGATCCAC
ATGGGCAATCCTGAGCCCTTGACTCACGCCCCTAGGAAGGTGTATGATACGCGGGATGATGACCGGACACCAGGC
CTCCATGGAGACTGTGACGATGACAAGTACCGACGTCGGCCGGCCTTGGGTTGGCTGGCCCCGGCTGCTAAGGAGC
CGGGCTGGGTCTCGGAAGCGGCCGCTGACCCTGCTCCAGCGGGCGGGGCTGCTGCTACTCTTGGGACTGCTGGGC
TTCCTGGCCCTCCTTGCCCTCATGTCTCGCCTAGGCCGGGCCGCGAGCTGACAGCGATCCCAACCTGGACCCACTC
ATGAACCCTCACATCCGCGTGGGCCCCCTCTGAGCCCCCTTGCTTGTGGCTAGGCCAGCCTAGCATGTGGGTTCT
GTGGAGGAGAGGCGGGGTAATGGGGAGGCTGAGGGCACCTCTTCACTGCCCCCTCTCCCTCAAGCCTAAGACTA
AGACCCAGACCCAAAGCCAAGTCCACCAGAGTGGCTGCAGGCCAGGCCTGGAGTCCCCGTGGGTCAAGCATTTG
TCTTGACTTGCTTTCTCCCGGTCTCCAGCCTCCGACCCCTCGCCCCATGAAGGAGCTGGCAGGTGGAAATAAA
CAACAACCTTTATTAAAC

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FIGURE 3282

MGLCKCPKRKVTNLFCEHRVNVCEHCLVANHAKCIVQSYLQWLQSDSDYNPNCRLCNIPLASRETTTRLVCYDLFH
WACLNERAAQLPRNTAPAGYQCPSCNGPIFFPTNLAGPVASALREKLATVNWARAGLGLPLIDEVVSPEPEPLNT
SDFSDWSSFNASSTPGPEEVDSASAAPAFYSQAPRPPASPGRPEQHTVIHMGNPEPLTHAPRKVYDTRDDDRTPG
LHGDCDDDKYRRRPALGWLARLLRSRAGSRKRPLTLLQRAGLLLLLLGLLGFLALLALMSRLGRAAADSDPNLDPL
MNPHIRVGPS

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FIGURE 3283

GCAGCGAGTGGCCTTCCCGGTTGGCGCGCGCCCGGGGCGGCGGCGCTGGAGGAGCTCGAGACGGAGCCTAAGTTA
TGTCTGGGAGGCGAACGCGGTCCGGAGGAGCCGCTCAGCGCTCCGGGCCAAGGGCCCCATCTCCTACTAAGCCTC
TGC GGAGGTCCCAGCGGAAATCAGGCTCTGAACTCCCAGCATCCTCCCTGAAATCTGGCCGAAGACACCCAGTG
CGGCTGCAGTCAGAAAGCCCCATCGTCTTAAAGAGGATCGTGGCCCATGCTGTAGAGGTCCCAGCTGTCCAATCAC
CTCGCAGGAGCCCTAGGATTTCTTTTTCTTGGAGAAAGAAAACGAGCCCCCTGGCAGGGAGCTTACTAAGGAGG
ACCTTTTCAAGACACACAGCGTCCCTGCCACCCCCACCAGCACTCCTGTGCCGAACCCTGAGGCCGAGTCCAGCT
CCAAGGAAGGAGAGCTGGACGCCAGAGACTTGAAATGTCTAAGAAAGTCAGGCGTTCTACAGCCGGCTGGAGA
CCCTGGGCTCTGCCTCTACCTCCACCCAGGCCGCCGGTCTGCTTTGGCTTCGAGGGGCTGCTGGGGGCAGAAG
ACTTGTCCGGAGTCTCGCCAGTGGTGTGCTCCAACTCACCGAGGTCCCCAGGGTTTGTGCAAAGCCCTGGGCCC
CAGACATGACTCTCCCTGGAATCTCCCCACCACCCGAGAAACAGAAACGTAAGAAGAAGAAAATGCCAGAGATCT
TGAAAACGGAGCTGGATGAGTGGGCTGCGGCCATGAATGCCGAGTTTGAAGCTGCTGAGCAGTTTGATCTCCTGG
TTGAATGAGATGCAGTGGGGGTGCACCTGGCCAGACTCTCCCTCCTGTCTGTACATAGCCACCTCCCTGTGGA
GAGGACACTTAGGGTCCCCCTCCCCTGGTCTTGTTACCTGTGTGTGTGCTGGTGTGCGCATGAGGACTGTCTGCC
TTTGAGGGCTTGGGCAGCAGCGGCAGCCATCTTGGTTTTAGGAAATGGGGCCGCTGCCAGCCACTCACTGGTG
TCCTGTCTCTTGTGCTCCTGTCTTCTATCTCCCCAAAGTACCATAGCCAGTTTCCAGATGGGCCACAGACTGG
GGAGGAGAATCAGTGGCCAGCCAGAAGTTAAAGGGCTGAGGGTTGAGGTGAGAGGCACCTCTGCTCTTGTTGGG
AGGGGTGGCTGCTTGAAATAGGCCAGGGCTCTGCCAGCCTCGGCCTCTCCCTCCTGAGTTGCCTTCTGTTGGT
GGCTTTCTTCTTGAACCCACCTGTGTAAAGAGGTTTTCAGTTCCGTGGGTTTTCCCTTTTGATTCTGTAAATAGTC
CCAGAGAGAATTCGTGGGCTGAGGGCAATTCTGTCTTGAGGAAGAAGCTGGACATTTCAGCCTGTGGAGTCTGAG
TTTTGAAGGATGTAGGGAGCCTTAGTTGGGTCTCAGACCATAAGTGTGTACTACACAGAAGCTGTGTTTTCTAGT
TCTGGTCTGCTGTTGAGATGTTTGGTAAATGCCAGGTTGATAGGGCGCTGGCTGCTTGGAGCAAAGGGTGCATTT
CAGGGTGTGGCCACCAGGTGCTGTGAGTTTCTGTGGCTCATGGCCTCTGGGCTGGTCCCTTGACAGGGCCACG
CTGGAGTCTTACCACCTCTGCTGCAGGGGTGGAAGGTGGCCCCCTCTGTACCCATAACCATTTCTTACAAAATAA
GTTACACCGAGTCTACTTGGCCCTAGAAGAGAAAGTTGAAGAGTCCCAGACCTACTAGCATTTTGAACATATGCT
TGTAAGTCCCTCGGAAAGTTTCTCGCGTACCAGACAGCGGCGGGGGCTGATAGCAATTTTAGTTTTTGGCCTCC
CTATCCTCTCACATGAGAACACTGCCTGGATGCATCTCATGATCTCTGGAGAATTTCCCCATCTTTCTCTTTT
CCATCGTGTGGATTCAATAGTGTGGATTTGAAGGTGCCCTGCCCCGACTCTCCTGCCGCACCCCTGGCCATTG
TACCTTTTGATGTTTAGAAGTTCGTGGAAGTAGACGCTGAGGTGTGCAGAGGAGCTGGTGGATAACAGAGAATGC
CAGGGAAGATGAGTGTGGGTGAGGTACTTGATGAAACGGTGCAGGCCAGGCGGGCCCTAATAAAACCCCTCTG
CCAGGTCTGGGAGTCCCAGGCCATCTGCTCAACGCTCTGTGGTTTGTGAGACCTGCAAGCAAGCCCCCTGTGAGG
GAAGCCTAGGTGTCCTTGAGCTGAACCGCACTGAAGAACTCTGTCTCTACTGGCTGATGCAGCAGAACTCTTGG
GAAATGTCTTAGTCTGAGAAATCAGGAGTACCAGATGATGCAGAGTTGAGATCATATTGCAAAGTTCTCTGT
TCCTGAGGAACATAATTTAAGGAAAAAATGGGATTTTGTTTTAGAGTTGGAAAAAAGCCTGATTAAAGAGTTTC
TGCCTGTT

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FIGURE 3284

CTCCGGGGCCCATGGGGCTCCTGACCATTCTGAAGAAGATGAAGCAGAAAGAGCGGGAGCTGCGACTGCTCATGC
TTGGCCTGGACAATGCTGGAAAGACAACCATCCTGAAGAAGTTCAATGGGGAGGACATCGACACCATCTCCCCAA
CGCTGGGCTTCAACATCAAGACCCTGGAGCACCGAGGATTCAAGCTGAACATCTGGGATGTGGGTGGCCAGAAGT
CCCTGCGGTCCTACTGGCGGAACACTTTGAGAGCACCGATGGCCTCATCTGGGTAGTGGACAGCGCAGACCGCC
AGCGCATGCAGGACTGCCAGCGGGAGCTCCAGAGCCTGCTGGTGGAGGAGCGCCTGGCCGGAGCAACCTCCTCA
TCTTTGCTAATAAGCAGGACCTGCCTGGAGCACTGTCCTCTAACGCCATCCGCGAGGCCCTGGAGCTGGACTCCA
TCCGCAGCCACCACTGGTGCATCCAGGGCTGCAGCGCCGTCACCGGGGAGAACCTGCTGCCGGGCATCGACTGGC
TCCTGGATGACATTTCCAGCCGCATTTTCACAGCTGACTGGAACCACTCCAGATGCCCCCACCTAGCAGTCCAGG
TCCCTCAACCTTCACCAAACACTACCCATGGGGGGTTGGGAGTCAGCCGGCCAAACTAACACTCCCCCTCCTCCA
CCCCAGCCTGCTGCTGCTACTGCTGCCGCTGCTGCTCTGTGGCCACCCGGCTCCCATGGCGGGAGGCTGTGCCCT
GGCTGTCTCTCTGGCTCCTGACCTGGCCTTTGGCTACCATACCAAGAAGAGAGGGCTGGGCGGGGAGGAGCTGCT
ACTGCTGCTACCGAGGCTGTGGGCCTCATCCTTCACTCAGTTGTGAAATAAACCGCTCCTTGCCCCGAAAAAAAA
AA

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FIGURE 3285

MGLLTILKKMKQKERELRLLMLGLDNAGKTTILKKFNGEDIDTISPTLGFNIKTLEHRGFKLNIWDVGGQKSLRS
YWRNYFESTDGLIWVVD SADRQRMQDCQRELQSLIVEERLAGATLLIFANKQDLP GALSSNAIREALELDSIRSH
HWCIQGCSAVTGENLLPGIDWLLDDISSRIFTAD

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FIGURE 3286

ATGAATGCAGCACTGAGCTCTGTTTGCCCTCTAAGCTTGTCCCCAGAAAAACAAGATATACCCTAAATATGCAC
GATCTGATTTTCTGGAGAGATGTGAAGAAGACTGGGTTTGTCTTTGGCACCACGCTGATCATGCTGCTTTCCCTG
GCAGCTTTCAGTGTCACTCAGTGTGGTTTCTTACCTCATCCTGGCTCTTCTCTCTGTCACCATCAGCTTCAGGATC
TACAAGTCCGTCATCCAAGCTGTACAGAAGTCAGAAGAAGGCCATCCATTCAAAGCCTACCTGGACGTAGACATT
ACTCTGTCCTCAGAAGCTTCCATAATTACATGAATGCTGCCATGGTGCACATCAACAGGGCCCTGAAACTCATT
ATTCGTCTCTTTCTGGTAGAAGATCTGGTTGACTCCTTGAAGCTGGCTGTCTTCATGTGGCTGATGACCTATGTT
GGTGCTGTTTTTAACGGAATCACCTTCTAATTCTTGCTGAAGTGTCTCATTTTCAGTGTCCCGATTGTCTATGAG
AAGTACAAGGAGATGGGCCACTAA

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FIGURE 3287

GGCCTGAGGGCGCCGCACTCGACTGCTTCGAGGTGACGCTGAAATGCGAGGAAGGGGAGGACGAGGAGGAGGCCA
 TGGTGGTGGCCGTAATTCCGCGGCCCGAGCCGATGCTCAGAGTGACCAACAGGAGAAGACCCACCGCCTAGAC
 CCAGCCCCGTAGAGGCAGGCAGTGATGGCTGTGAGGAGCCGAAGCAGCAGGTGTCTTGGGAGCAGGAGTTCCTGG
 TGGGCAGCAGCCCCAGGAGGCAGCGGGCGGGCACTGTGCATGGTGTGTGGCGCTGAGATCCGGGCACCCCTCGGCCG
 ACACAGCTCGCTCGCACATCTTGGAGCAGCACCTTCACACCTTGGACCTGAGCCCTTCTGAGAAGAGCAATATCC
 TGGAGGCCTGGAGTGAAGGGGTGGCCCTCTTGCAAGACGTGAGAGCTGAGCAGCCGTCCCCACCCAACCTCAGACT
 CGGGCCAGGATGCCACCCAGACCCAGACGCCAACCCAGACGCTGCCAGAATGCCAGCCGAAATCGTCTGTTCTCC
 TTGACTCTGAGGATAACCCATCCCTCCCTAAAAGGAGCAGGCCCAGGGGACTCCGCCCCCTCGAGCTTCCTGCTG
 TCCCTGCCACAGAGCCAGGAAATAAGAAGCCCCGTGGTCAGAGATGGAAGGAACCCCCAGGGGAAGAGCCAGTCA
 GAAAGAAAAGAGGCAGACCTATGACCAAAAACCTGGACCCTGACCCAGAGCCCCCATCGCCAGACTCGCCCCACGG
 AGACTTTCGCAGCACCAGCCGAGGTCCGACACTTCACTGACGGCAGCTTCCCCGCCGGCTTCGTCTTGCAGCTCT
 TCTCCACACCCAGCTCAGGGGCCCAGACAGCAAGGACTCACCCAAAGACAGGGAAGTGGCAGAAGGAGGCCTTC
 CCCGGGCGGAGAGCCCCCTCCAGCTCCCCCTCCGGGGCTCCGCGGGACACTGGATCTCCAGGTTATCCGCGTGC
 GGATGGAGGAGCCCCCAGCGGTGAGCCTCCTGCAAGACTGGTCCAGGCACCCCCAGGGCACCAAGCGTGTGGGAG
 CAGGTGACACCTCAGACTGGCCACAGTTCTGTGAGAATCCAGCACCACTGTGGCAGGGAAGCCGGAAGGGA
 ATGGAGTGTAATTCCTTGCTTTCCTGGGGAGGGAGGGAGGGATGAGGCAGCGTCCCCAGTGGCTTATAACTCAG
 AGCTGCCTGGCTCACCCACCTGGTGGAGAGAGTAGAAACAGGTGCCAGGGCAGGAGGGGGCTGGGGCAGCATCCA
 CTGTTATTTGGGGCACTGGAAGTGCTGTTCCTGGCCAGGCCTGAGGTGGGCGAGGGTGGCTGAGGCTGTTGT
 GCAGTAGGGCACTGGGCTGTGGAGAACACCTACCCAGTCCTTCGCTGACCCCCACCTCTGTTTGTCCCCCATG
 ACCTCCTCCCACCCTCCCCCTGCTCCCCACCAATTCTCCCTTGGCACAGTGCCTTACACAAGAGTGGTCATAAGGG
 GGTTTGAACCTGAGTCCCACTACCTCGGGGGACACCTCTCCTCCCCACTTGTTTACAGGCTTCTAAACCAGGAGGCCT
 CCATTACCTCTTCCCTGTCCACCCCTGCAGAGGCCTGAAGCTGGGCCTGGGCACCCCATTCCTCCCGTTCTCAT
 TTACATCTGTTTTCTGTTGTATATATCACCTTTGTTGACAATAAATTATTTTTTTTTTATT

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FIGURE 3288

GCGCCCAGCCGCTGAACGGCGTGGGCAGGTGGGCGGTGGGGTTCCAGGGCGCCCCGAGGACAGGGGGCCCCGACT
TCAGGGGAACCCCAACCCTGAGGGGCGTACATAGTAATCACGCCCCAGCCGCACCGGACCTTGCCTCATCCCTT
GCGTCCCCCACTTCTGCACAACTTTTCTGACGCCCTGGCTCGTGGGGGTCTGAGAGCGCTGGGGCTACCAGG
TGGGCTCCCAACCCCGCCGACCTAGCCACGCTGACCTCCTGCCTCTCCTAACCTCAGTGGCGACCTCTCCAGGC
CGGGCCGGGCTCGGCACTCGGAGCGAGTGCGGCAACCACTGTGCTCTCCGAAGGCTCCTGCGCCCCCGGGGCA
GCTGGGCGGGTAATGCCCTCAGTGATGGAGAAGCCGAGCGGGGCTCTGGGATCCTGTCCCGTAGCCGGGGCAA
GACGGTGCCCAACGGCGGACAGCCCCACTCGGAGGATGACAGCAGCGAGGAGGAGCACTCGCACGTCCCTTCTGT
GGCTGCAGACAGCATGATCCGCGTTGGAACCAATTACCAGGCCGTAATTCCGGAGTGCAAGCCTGAGAGCCCCGC
ACGCTACAGCAACAAGGAGCTGAAGGGGATGCTGGTGTGGTCAACCAACCACTGTGTGTGATGCAAGCTTGA
CAAGTACATTGCGATGGCCAAGGAGAAGCATGGCTACAACATTGAGCAGGCGCTGGGCATGCTTCTGTGGCATAA
GCACGATGTGGAGAAGTCGCTGGCCGACCTGGCCAACCTTCAACCCATTCCCTGACGAGTGGACAGTAGAGGACAA
GGTGTGTTTGAACAGGCCCTTGGCTTCCATGGCAAATGCTTCCAGCGGATCCAGCAGATGCTGCCTGACAAGTT
GATTCCAGCCTGGTGAATACTACTACTCTTGGGAAGAAGACCCGAGCCGAAGTGTGATGGACAGACAGGC
CCGGCGGCTGGGGGGCCGCAAGGACAAAGAAGACAGTGATGAGCTCGAAGAGGGTTCGAGGAGGCGTGAGTGAGGG
AGAGCCCGATCCTGCAGATCCCAAGAGAGAGCCTTACCCCTCTCGGCCCTGAATGCACGCCACAGGCCCTGGGAA
AAAGGAGGTCCAGGTGTCTCAGTACCGCCACCATCCCTTGCGAACCCGGCGTCGCCACCCAAGGGCATGTACCT
GAGCCCTGAAGGCCTCACGGCAGTGTGAGGAAGCCCGGACCTTGCCAACCTCACGCTCCGAGGTCTTGACTCTCA
GCTCATCTCCCTCAAGCGCCAGGTACAGAGCATGAAGCAGACGAACAGCAGCCTGCGCCAAGCCCTGGAGGGCGG
TATTGATCCACTACGCCCCCGGAGGCCAACACCAAGTTCAACTCCCCTGGACCACAGATGAGCAGCTTTTGGC
TGTTCAAGCCATCCGTAGGTATGGCAAAGACTTTGGGGCTATTGACAGAGGTGATTGGGAACAAGACTCTGACCCA
GGTGAAGACTTTCTTTGTGAGCTACCGGCGCCGCTTCAATCTGGAGGAGGTGCTGCAGGAATGGGAGGCTGAGCA
GGATGGGGCCCCCTGGAGCCCCAGTCCCCATGGAGGAGGCTAGGAGAGGGGCTCCATTGCCAGCCCCAGCCCTAGA
GGAAGATGATGAGGTCCAGATTACATCGGTCTCCACGTCCGTGCCCCGATCAGTGCCCCCTGCGCCACCACCCCC
TCCACCTCCCACCTCGCTGTCCCAGCCACCCCCGCTGCTGAGGCCACCTTTGCCCCAGGCTCCCACTCTGCTCCG
ACAGCCACCCCCACTGCAGCAGGGCCGCTTCTCCAGCCCCGGCTGGCCCCCAACCAGCCCCACCGCCTCTCAT
CCGCCCCGCTCTGGCTGCCCCCGCCACAGCGCCCCGCCCTGGCCCTCAGCCCCACCCACCTGATTGGAACCC
TCTGGAGCCCCCAGCACCTCACTCTGAGCCCTGACGTCTCCACCAACCACGGGCTCCAGGACCCCTTTGCTGG
CCATCCCCAGGCATCTCTGGTGTCACTGAGGACAGAAGGGACTAGGGCTCTGGCGGGGTCTTTGTAAGACCAGAG
TTTCGGACAGCCAGCCCCGCCCTTTGGGTCTGTCATGTGTCTGCGCAGCTGGGCTCTCTCTGGGGCCATGG
CCGGGCTCAGGGGCCCTTTGAGCTGGCTGAGGGCACTTTCGCTTCTGCGCGGTACTGGAATGGCTGTGTCTTAG
TCTGCTGGGGCTTGGCTCTGGGTCTGCCCCTTGTGTGTCCGGGGTAGTGACCTTAGCGTGGAGTGGGGAGAGG
GCAGTTGGGTGTGCTGGCTGTTCCTATTCTCTTTCCCTTCTTTAGCAATAAGTCTGGGGTGAGGTGGGGAGGG
AGGCTGCAGGGGGGGAGGTGGGCAGAGGGGCCTTACAGCAGCAGAGGCTGGAAGAGAAGCTCTGTCTTCAGGGC
CAGCTGGGAAATGCTAAGGAGCTGAGGGTGCCCAACCAAGCCACCTTCCAGAACTTGAGAAATGGGGTTGGG
AACTTATGCAGACATGGATTTATTTTCAACATTTTAAAAATTAATAAATAAATACTAA

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FIGURE 3289

CCTCGTGCCGCGAGTTCTGCCACCGTCACTGAGAAGCTCAGCGGTAGCTTTTGGGAAGCAGGACGTTCTCACCAGG
AGAGCGTCTCTCGAGATTCTGCTCCCTCCATTAGGGCGTTTGGGAGCCACCCCTTCATTTTTTAAAAAAGT
ATTTCTCTGTGACCGACGGCCGGGGCCTTCTGACGGTCTGAGGTCTTGCTTGGGCCAGTCACCTCCTGTACGGT
CCGCGGAGGGGGGAAGGATAAGAGGGCGAGGAGCTCATCGCTCGCCACCCCGTGGGCTTCTTGGGCGCAGGTCG
GAGCTGGGTGGGCCGGCTCCCGGCCCTGGCTTGGGCGACCATGTCGTCATCCGCCAGCAGCTGGCGGAGGAG
CTGCAGATCTTCGGCTAGACTGCGAGGAGGCTCTAATTGAGAAATTGGTAGAGCTTTGTGTTAGTATGGACAG
AATGAGGAGGGAATGGTAGGCGAGCTTATAGCCTTCTGCACCAGCACACATAAAGTTGGCCTTACCTCAGAGATC
CTGAACCTTTTTGAGCATGAGTTTCTGAGCAAAAGATTATCGAAAGCCAGGCATAGTACCTGCAAGGACAGTGGC
CATGCAGGAGCTAGAGACATTGTTTCCATTCAAGAGCTAATTGAAGTGGAAGAAGAAGAGGAAATCCTCTTGAAC
TCTTACACCACACCTTCAAAGGGTTCTCAGAAGCGAGCTATCTCTACCCAGAAACCCCTTAACAAAAAGGAGT
GTGTCAACTCGTAGCCCCATCAGCTACTCTCACCGTCAAGTTTCTCTCCAAGTGCTACTCCCTCCCAGAAATAC
AACTCACGAAGTAACCGAGGAGAAGTGGTTACCTCCTTCGGCTTAGCACAGGGAGTATCTTGGTCTGGGAGAGGA
GGAGCTGGAAACATCAGCCTGAAGGTCTTGGGATGTCCAGAGGCACTAACTGGGAGCTACAAATCCATGTTTCAG
AAGCTCCCAGACATTGAGAAGTTCTGACCTGTAAGATAGAAGAACTTGGCAGCGAACTCAAGGAACATTACAAG
ATTGAAGCTTTCCTCTTTGCTAGCCCCAGCACAGGAGCCTGTCACTCTGCTGGGCCAGATTGGCTGTGATAGC
AACGGGAAGCTGAACAACAAGTCAGTGATTCTCGAGGGGAGACCGGGAACATTTCCTCGGGTGCTCAAATTCAGTG
GATTTATCTGAGCTTAAGGAATATTCTCTGTTTCCTGGACAGGTTGTAATTATGGAAGGAATCAACACCACTGGT
AGGAAACTTGTGTCACCAAACTCTACGAGGGTGTGCCACTTCCATTTTATCAGCCCACTGAAGAGGATGCAGAC
TTTGAGCAAAGCATGGTCTGTTGCTGTGGACCATACACCACATCTGACAGCATCACGTATGACCCCTGCTT
GACCTGATTGCTGTCAATCAACCATGACCGGCCAGATGTCTGCATCCTGTTTGGCCCTTTCCTGGATGCTAAGCAT
GAACAGGTGGAGAATTGTCTACTGACAAGTCCATTTGAAGACATTTTCAAGCAGTGTCTACGAACAATTATTGAA
GGCACAAGAAGCTCCGGCTCCACCTTGTCTTTGTCCCGTCATTGAGAGATGTGCACCATGAGCCTGTGTACCCC
CAGCCGCTTTTCACTACTCCGATCTGTCTCGAGAGGACAAAAAGCAAGTACAGTTTGTGTCCGAGCCCTGCAGC
CTCTCCATAAACGGAGTGATCTTCGGCTTGACATCCACAGATCTGCTTTTCCACCTGGGGGCCGAGGAGATCAGT
AGTTCTTCCGGAACCTCAGACAGATTAGCCGAATACTCAAGCACATCTTGACCCAGAGGAGCTACTACCCACTC
TACCCGCCCCAAGAAGACATGGCCATTGACTATGAGTCGTTCTATGTTTACGCACAGCTGCCTGTACCCAGAT
GTCCTCATCATCCCGTCAGAGCTGAGGTACTTCGTGAAGGATGTCTCGGCTGTGTCTGTGTGAACCCTGGGCGC
CTTACCAAAGGGCAGGTGGGAGGCACCTTCGCCCCACTTACCTTAGGAGGCCGGCAGCGGACGGGGCAGAGAGG
CAGAGCCCATGCATTGCTGTGCAGGTGTCAGGATCTGAGGCTTCTGTCTCTGCTGTTCTCTGCTGTGTGGGCC
CTTAAAGTCTTAGCCAAGAGCCAAGACATAGCCCTGTGACAAGGTGAACAGTTGGGTGGGAAAGGAGAGAGGAGC
CAGCCAGGGAGGGGCAGCTGCAGTGACCAGGCCCAGCAGGGAGGACTTGTGCAGCCGGGCCTGCCTCTGAGTGGT
GCCTCTCCTGGAAGGAAGCTCTTGCTTCTCAGTCCATGCTCCGTGTCCAGAAGTAAGCCAGCTGTGGATCCCGCC
CACTCAGAAAAGGCGAGAAGGCTTTGTGATTTTCTACATGAATCAAACACAGAAACAACTTTTGGAGAAATTAAA
TTCTGAGTGTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3290

MSASAQQLAEELQIFGLDCEEALIEKLVELCVQYGQNEEGMVGELIAFCTSTHKVGLTSEILNSFEHEFLSKRLS
KARHSTCKDSGHAGARDIVSIQELIEVEEEEEIILLNSYTTSPSKGSQKRAISTPETPLTKRSVSTRSPHQLLSPSS
FSPSATPSQKYNRSNRGEVVTSTFGLAQGVSWSGRGGAGNISLKVLCPEALTGSYKSMFQKLPDIREVLTCKIE
ELGSELKEHYKIEAFTPLLAPAQEPVTLGQIGCDNKGKLNKSVILEGDREHSSGAQIPVDLSELKEYSLFPGQ
VVIMEGINTTGRKLVATKLYEGVPLPFYQPTTEADFEQSMVLVACGPYTTSDSITYDPLLDLIAVINHDRPDVC
ILFGPFLDAKHEQVENCLLTSPFEDIFKQCLRTIIEGTRSSGSHLVFVPSLRDVHHEPVYPQPPFSYDLSREDK
KQVQFVSEPCSLSINGVIFGLTSTDLLFHLGAEIISSSSGTSDRFSRILKHILTQRSYYPLYPQEDMAIDYESF
YVYAQLPVTDPVLIIPSELRYFVKDVLGCVCVNPGRLTKGQVGGTFARLYLRRPAADGAERQSPCIAVQVVRI

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FIGURE 3291A

GGAATTCTCTGGGGCTTTGGGGAATTTAGTGCCTGGGTGAGCCAAGAAAATACTAATTAATAATAGTAAGTTGTT
AGTGTGGTTAAGTTGTTGCTTGGAAAGTGAGAAGTTGCTTAGAACTTTCCAAAGTGCTTAGAACTTTAAGTGCA
AACAGACAACTAACAAACAAAAATTGTTTTGCTTTGCTACAAGGTGGGGAAGACTGAAGAAGTGTTAACTGAAA
ACAGGTGACACAGAGTCACCAAGTTTCCGAGAACCAAGGGAGGGGTGTGTGATGCCATCTCACAGGCAGGGGAA
ATGTCTTTACCAGCTTCCTCCTGGTGGCCAAGACAGCCTGTTTCAGAGGGTTGTTTTGTTTGGGGTGTGGGTGTT
ATCAAGTGAATTAGTCACTTGAAAGATGGGCGTCAGACTTGCATACGCAGCAGATCAGCATCCTTCGCTGCCCCCT
TAGCAACTTAGGTGGTTGATTTGAAACTGTGAAGGTGTGATTTTTTCAGGAGCTGGAAGTCTTAGAAAAGCCTTG
TAAATGCCATATATTGTGGGCTTTTAACGTATTTAAGGGACCCTTAAGACGAGATTAGATGGGCTCTTCTGGATT
TGTTCCCTCATTGTGTACAGGTGTCTGTGATTGAAAATCATGAGCGAAGTGAAATTGCATTGAATTTCAAGGGAA
TTTAGTATGTAATCGTGCCTTAGAAACACATCTGTTGTCTTTCTGTGTTTGGTCGATATTAATAATGGCAAAA
TTTTTGCTATCTAGTATCTTCAAATTGTAGTCTTTGTAACAACCAAATAACCTTTTGTGGTCACTGTAAATTA
ATATTTGGTAGACAGAATCCATGTACCTTTGCTAAGGTTAGAATGAATAATTTATTGATTTTTAATTTGAATGT
TTGTGCTTTTTAAATGAGCCAAGACTAGAGGGGAACTATCACCTAAAATCAGTTTGGAAAACAAGACCTAAAAA
GGGAAGGGGATGGGGATTGTGGGGAGAGAGTGGGCGAGGTGCCTTTACTACATGTGTGATCTGAAAACCTGCTT
GGTCTGAGCTGCGTCTATTGAATTGGTAAAGTAATACCAATGGCTTTTTATCATTTCTTCTTCCCTTTAAGTT
TCACTTGAAATTTTAAAAATCATGGTTATTTTATCGTTGGGATCTTTCTGTCTTCTGGGTTCCATTTTTTAAAT
GTTTAAAAATATGTTGACATGGTAGTTCAGTTCTTAACCAATGACTTGGGGATGATGCAACAATTACTGTGCTT
GGGATTTAGAGTGTATTAGTCACGCATGTATGGGGAAGTAGTCTCGGGTATGCTGTTGTGAAATTGAACTGTAA
AAGTAGATGGTTGAAAGTACTGGTATGTTGCTCTGTATGGTAAGAACTAATTCTGTTACGTATGTACATAATTA
CTAATCACTTTTCTTCCCTTTTACAGCACAAATAAAGTTTGAGTTCTAACTCATTAGAATTGTTGTATTGCTAT
GTTACATTTCTCGACCCCTATCACATTGCCTTCATAACGACTTTGGATGTATCTTCATATTGTAGATTTAGGTCT
AGATTTGCTAGCTCCAAGTAATTAAGGCCATGTAGGAGAGCATGGTAACCACAGATAGAAGTGGTATTATCCCAA
GTGGTCTGCAGACTGCTGAGTGGGGATGGGATCTGCTCTCTGTTGAGAGTTGGTAATCATTGGTTTGAATGTGA
TGAAACCACTCAAGCCAATGAAGGTGGGTGTGAGGTGGGGAGTACTTTGCCATAATTTTTTAAACATTACCTG
GTTAGAGTTCTAAGTGGTACTTATTTTTGTTTGGTTAGGGGAAAGCCTGAATAAAAACAGAAATGGACACATAAT
ATGCATATTCCATAGTCTTTGGGAGGCTGGAATGTGCTGGGATTTGGGTCTAAGTGTATGCGTAATCTTACCT
CACTAAAGAATTTGCCTTGTTTTTCTTTTGGTGAGTGACTAAAACGTCTGGGCTTCCCTGTGTGCGTGTCTAC
AGTAAGCAAGCAGAGGCTGTGCAAAGGTGTGAGCAGGATCACGTGGAATCTGGAGGATACATCTTGGCTTGCAA
CTGCCTCTGTCTCTGGGTGGGACTGTTCTGTCTTGCCTGCACTGCTGTTCTGTGTTACCTCTTGGGGTGAAGGTTT
TGCTTACAGGAGACAACTTTGGGCGTAGAATGGAAGCCACTGCCAGCCTCTGTGCTGAGAAGGAAGGTGCTTGT
TTCAAAGGGAGCAGCAAGGGAGGCTGTTCTACTCACCTGGGCTGTTTGCCTGAGAAGGGGAGATAAGGGCTGA
ACTGGGACTAGCCAGGGGGACCAACACAAATGGTGGGGGATCATGACCTGAAGGATTCTTTCTTCCCCTCCAGCT
GCAGGGCTGGTTGCCGTCCTTGCAACTGTGTCTTATTTGCCTGTGCCGTTATATCTTGGTGACCCCTCCACGCT
ACACTACTGACAAACGGGTGGAGTGTGTTGGGAGAGTCACTGTGCCGCCACCTAGTAACAACTTCTGTCTGTGCT
CATGGCATCTCCAAGATGGGGCACTGCTGTGTGCAGAAATCCAGGGTCCCTCTTCTGCTTGCAACTCCTTTCCCTG
GATGCCCCAGAAACAATCCAGGCCTCCTTTCCTATCTTACCCCTTTGCTTTGCTTTTTTACCCAGCACCTCTATA
ACCGCCTTCTCTTCTTTTTCAGAACTCCTTGTCTTCTCATCCTGTTTTTTATGATTACAAAACCTTGTCTTCCACCC
TGGAAGATAACTGCTATAGATGCCTGTATGTAATGGTGCTGTCTCCAGCAACTGGCATGCTGAAGAAGAATTGA
TTCACGGGGTATAAATGTTGGGGATTGGAAGTGGGGATGAAATGGCACTTGTGATACAGGAGCAGAGAGGTGAG
GCCGACTGCTGAAGACAGCTCGCCACCCTCCTTGCTCCACTCCAATCCAGGGGCTGGGGCCACATTCTTTGCCT
TCATTTATCTCAGATCAGGTGAGATCGACAGGAGGTGTTGATGGCAGTGCCAGCAATTATTGCTAATCCGTTTG
CATCCTTATGCTATAGATCTGAATTCAGACTTTGTGAATTTCCAGAGGTGTGGGTAAATATAATAGAATTCAGTGAG
TGGGCATGGCTGATCTTGTGCAAAATTAAGTTATGGGGCATAAGAAATAGCAAAAGTTGAACTTCTTTTTAAAAAG
GAAAGTACCCTGAGAGCCAGTATTGGTTGAGGCTCTTCAGTATGCCAGGTTGGCAGCACTGAGAACCGCAGGAA
CGGCCTGTTGTTACAAAAAGGAGATTGACTCAGCTGCCCTTGGTGATCTGACTGACTATGACTGCTGAGAGATT
CCAAGGACCCTTAATGCCAGGGCTAACCTCTCCATGTGCAGTGAGACCTCTGGAGGAAGTGTATCCTCTGGCTT
TGTGTGGTACTCATTATGGTGCAGTGCGGGCATGAAATGAAGACACCCAAATAGGCTTACAGATACGATATGTTT
TAAATGTTGCTATTTAACAACAAACATACTGACACTGTTTGGAAATGGCAACAGGAAGATAGCAAAATGAATACTA

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FIGURE 3291C

TTTTCTCTTTGACCACTAACCATGTGAAATTTCTCATATTGACCTTTATAATGATCATGAACCTCTTAGTATCAT
TGGGAAGGCCACATTTGCCACTTATGATTGTAAACCTTATCCTCCATTTTCTGTTATTGTTGGTGCAAAAAGC
ACCTATTATACCAGGACTTTAAAAATCAGTCTGATAAGTCTTTGATAAGTCTAATAATAATAACTGATAAGTCCA
TTGAAATTTGCTTCTGATTACTTTTCTTTAGTAGCTAAACATGTATGTACTCCTATGATTACAATGAACACTCCT
CTCCATTTAAATTAATTATTTACATTGATGAAATAGCAAAATGTTAATGACTAAATACTGTCTTGGTTTTTTCGT
TCCAGGTCAGTCAATATTAACCTCTTATAATTTCTTTTTTCTTTTATGTGTGTGTGTGTGTGTATTTTTTTTT
TTTTAATTTCAATGGCTTTTGGGGTACAAATGGCTTTTGGTCATATAGATGAATTCTACAGTAGTGAAGTCTGAG
ATTTTACTGCACCGGTCACCTGAGTAGTGACATTGTACCCAATATGTGGTTTTTATACCTTGCCCCCTCTTA
CCCTCCCCACTTTGAGTCTCTAGTGTCCATTATGTCACTCTGTATACCTTTTGTACCCATAAGTTAGCTCTCAC
TTATAAGTGAGAACACACAGTATTTGGTTTTCCATTCTGAGTTGCTTCACTTAGAATAATATCCTCCAGCTCCA
TCCAAAATTGCTGCAAAAAAAAAAAAAACCACAAACATTATTTGTTCTTTTTTATTGCTAAGTCATATCCATG
GTGTAGAGATACCACATTTTATTTATCCACTCACTGGTTGATGGGTTGGTTCCACATCTTGTCAATTGTGACTTG
TACTGCCATCAAGTGTCTTCTGGTATAATGACTTCTTTTCTTTGGGTAGATACCCAGGAGTGGGATTGCTAGA
TCAAAATGGTTCTTAACATTTTCTCTCTGATCTATTTCTGGAATTTTAGGCTCCAGTTTTTGTGTTGTTGTTA
ATAAAATGCAATGGAATGTAATGATCATCACTTTTCATTATGCTTTAAAAATCTGGTAAATGGAGGCTAGAACACT
CCTGTAAGGCAAGAATATTCTCTCTGTTGGAACCTCAAATACACAGAAGTGGGTAAATCTCAATCTTAATCTTTGA
TTCAGGACACAACATGGCTCTCTTTACTTGCTTCTTTAATTGTTTTTAAATAATGTGGTAAGCATTCTCTGAAT
CTCCTATCCAATACAAAACTAGGACAATACAGACAGTAACTCCTATGGTTACAATGAACACTCCTCTCCACTTA
AATTAATTATTTACACTGATGAAATGAAATAGCAAAATTTAATGACTAAATACTGTCTTTGATTTTTTGTTC
AGGCTGTCAATATTAACCTCTTATAATTTCTTTTTTTTTCTTTATGTGTGTGTGTGTGTGTATATATATATAT
ATTTAATTTCAATGGCTTTTGGGGTACAAATGGCTTTTGGTCATATATATGAGTTCTACAGTAGTGAAGTCTGAG
ATTTTACTACACCTTCCACTTATGTGGTCCCACACCACCCGCTCCCCTGCCGCTCCTGCCACCCCTAGGCCA
AGGTAATAATCATCCTGAATCCTGGGTTTATCTCTCACTTGCTTTCTTTTATATAATTTTGTAAAAGAATCTGA
TCTAAATGTGTTTTTCAGAGTATATATTTATATTTTAGCTGTTCTTAGAGAAAATTTATTATTTTGCATGTAATC
TTATGGACATTTCTCATTTAATACCATGGTAAGATTAGCCCTTGCCAGGGGATAGTTTATTAGTTTGTGTTAC
TGGATAGAGCTCATCATGTGACTATACCTCAGTTAGTTTATCAGTTCTCCCATCCATGGTGACTAGGTTGCCTCT
CAGCCTCTCAACAACACTGTTTCTCAGTGTCTTGTAGAAGTGATATGTGGGTGTTTTCTCCTTACACAGAGTTG
AAAGGTGACGACAACAACGTTGGCACTACCAATCCCCACCCCTCCAGAGGGGTAACCAAGTGTACCAAGTTGCTG
TGTTTCTGCTACACCTCGCCTTATTCATTCCATTGTATCTGAAAAACGTGTTGCATGGTTTCTTTCTATAG
AAGTGGTAAAAATGCTATTGTGTCCTGTACATTATTGATTACTTTTTTTCATTTAACAGTAGGGAGATGCCTGGGA
GTACACAGAGAATGCCCCATTGTTTTCAACTCTGCACTGTATGTCTGTGAGTTTAGCCATTCTGCTGTTAAT
GGAAATTTACAGTATTCTAATCTTTTGATATTACAAACAGTTCTGTGCGATCATCGTCATACACAACCCCTTG
CACAATGCATGAGTGTTTCTCAGGGTAGGTACCAAGAAGTGAAATTCCTGGGTCATAGGGCGTGAGTCCGACATT
TTTCTCCATTCTGCCCTGTTGCCCTCCAGAGTGGGTGTCCAGCTTGCATACCTAAGTATGAGAGTATCTGTTGT
TCATATCCTCTACGACGCTCCATATATGAACTTAAGTTCTGTAGTTGCCATCTTTGATCTATCATGTATGCA
GTGACCTACTAAGACTGTAATTGGTACAGTAGATTCTGTGATCTGTGTGAATTTAGCATTTCATGGGCTTAAT
GCTGACAAGGCCCCCAGGGTCCAAGACATATAATCATGTATAATTTGTCAAGGTATAATTTTTTAAATTGCTTT
TGTCATGTGTCTGCTGGTGATGCCCAACCCAGTGCTCTGCACCCAGGTCACACTGTGGCTTTGTCTCTGCTTAT
GCCTGCATTGCAGCAACTGTCCTGAAGAGACCAAAATATGCAGATTTAGGTAAGTCCATGGCTAATGTTATTAT
ATTATGTGCTATTGTAATGGATGGGGCTGTGGAGTGATGAATTTATAAATCACTGGTCTTGTAATTAATAATTCA
AACACTATAGAAAAAGGCCATGTAGAAGATAAAAGTTCTCTATAATCCCGGACCCCTAAGATAACTACTAATGA
CAACTTCATTTATATTCCTTCAGACATTTTCTGGCTGTGGATGTACTAAATGTATCCTATTATTCTCTGCCCTA
AAATGGAATCATACAAGGTGTACTGTTATTTTTATGGCTCTATAACATGTATATTGTACGTGTTGGTATGGTCA
TTTTAACCATTTTTCTAGTGTATGGCTTTGAGGTTATTTGCAAGTTTCTAGCCATCTCAAAGTGTGCTGCGGGGAT
CTCTTTTGCATCCCTCTGGGTGCAGAGCTGAGGCACCCAGAGGCAGTGTCCAGAGGAGGCAGCATCTGTAGGTGT
CTTCACCTGCTCTGGCTCTTGGCACATCTGGTTGGTGACACTGTTTTGTGAGATGGGTTGAAAGCACGTGCTGCC
AAAATAGAATAATGTTGGTCTCTCTCATGTGCCGTGGAAGTGGGGTAAAACTGCGTAGTGGCTGCAGCTGCCT
GTCCATACCGGAATCGAGTATAACACGGTGCCTGGCTTAGCACAAAAACAGTAGTGGGTCTGCAGGCCCCAGAGT

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FIGURE 3291D

CTAATTCCTGGTATTCTTTCCCTACACAGATTAAATAAACCAAAACAAACTATTCTAGGAAAGCGTCTGTGAC
ATTGTAAAAAGTGGTATTTAATGATCTTTTATTCACTTGTCTGTTTAGTTTGTTGAAATCTTAAGTGGCATCCT
GGTCTGGGAAGGAGTGCTGTCTGCGCCTGCCCTCCGCTGGGCACAGCGTGGCTGCTTCAGGGGCTAAGCACACAC
TTTCTGTCTTCTAAAGGGCCGCCACATGCCAGGAGCTCAGGTGTGAGCCCGGCTCTGGCTCTTACCTCATAGGGT
CACTCATAGGGGCACAGGGAGCAGAACATTGTACACAGCGAGGCCACCCCGGCTTGGCATCTGCCTCGGTGGAC
TTACTACCTCTAGAAGGAAATACCTGAGTTCCTCTGGCCTCAGCTCCTAGAGTGACTGGTGTGCTGTCCCTGTTA
CTCTTCTGTCAAGGTGACAACTGTGTGACCCATCATCTGTGTGTCAAAGCAAGGCCCTGCCTGGGCCTCTGCTCC
TGTGCTGACCCCAAAGGCAAATGCTTTGCTAGTTTCTTCCAGTTAATTTACCTATGAATAGATGTGTGAAAAC
TGTTCAAAGCCATACCTGCACATGTTTGAACCTCAAACCCTGTGGGTGATTGAGTGGCATCTTTCTCTAACCCCC
AGCCTCCCTTCCCACAGAGGCCACCGTCATGGCCAGTTGCTGCAGTTTCTTTCCAGAGAACCTGTGTATGTGTAA
AGCTGTACAGGCGTGGGTACACCACACAGCCTGTCTTGCAGTGTGGACTGTTGAGTTACTAGTACATCTAGGTAA
GCACCGCATATCTGTATTCTGTCTGCCTTGGTCTTTTCAACATCTGTGTGGTAGCCGTGTTTGAATTACCCATT
CCCTTTTGGGGAACCATTAAGTTGTTTCAGCAATTTTACTGTAGATAAGGCTATACCGCATATCTGTGTACAT
GGGTTTTATGTACATGGGCAAGTATATCTGTGAGAGAAAAGTTTCTCAGGAGGAATTCTGGGCACAGCATGTG
TAAATTTCTAAATATGATGGACACCCCGCTTCCACCTCAAGGAGGTTGGTCCCATTGACATTTCCCCACACCT
TCACCCAGGCTGTGCCCTTAAACTTGGTTATTTGTCAATGTGAGAAGTGAAAATAGTATTTAATTGTAGTTTGG
ATTTGTATTCTATTGGGTTGTATACTTACTGATTAATAATAAGAGCTCTTTACATATTAAGGAAATTAACCCTT
TTCAAATACATTCTATTTCTCACTAATCTTTAAGTTTTATTGTAATATTTTGCTCTTTAGTTTATATATATATG
TATATATATATATATGTATATATATATATATACATATATATATACATATATATATA

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FIGURE 3292

MFGSSYSLLSSHSELSCLCPPSPPLVPSVRSSHFLLGPSPF SVAGCLPAWRWTFHVTGISMYILVWSVSTLNFV
SSSISLYRQSSQTHLKRLFLRILNLPKGSPMDGFLEVYKCSEIVFFCGKHNFHLLVRAQKRS

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FIGURE 3293

AGCCCCCATCCCCGCCCTCTCCGCCCCCTCCCTTGTCCTCCGCCCCCTTCCCGCCCCAACTCAGGTTCTGCCCC
 ACCCCGCCCCAATTCACGTCTGCTCCGCCCCGACGTAGGCCCCGCCCTGGCCCCGGGCCCCGCCCCGTCTGA
 CGCAGGCCCCGCCCTCTCCGCCCCGCCCGGCTCGGGCGGCCGGAGGACCCGGAGCTAAGGCGCCGAACCCG
 CGGCGGCGGTGGGGACGATGTGGTTCTTTGCCCGGACCCGGTCCGGGACTTTCCGTTTCGAGCTCATCCCGGAGC
 CCCCAGAGGGCGGCCCTGCCCGGCCCTGGGCCCTGCACCGCGGCCGCAAGAAGGCCACAGGCAGCCCCGTGTCCA
 TCTTCGTCTATGATGTGAAGCCTGGCGCGGAAGAGCAGACCCAGGTGGCCAAAGCTGCCTTCAAGCGCTTCAAAA
 CTCTACGGCACCACAACATCCTGGCTTACATCGATGGACTGGAGACAGAAAAATGCCTCCACGTCTGTACAGAGG
 CTGTGACCCCGTTGGGAATATACCTCAAGGCGAGAGTGGAGGCTGGTGGCCTGAAGGAGCTGGAGATCTCCTGGG
 GGCTACACCAGATCGTGAAGCCCTCAGCTTCTGGTCAACGACTGCAGCCTCATCCACAACAATGTCTGCATGG
 CCGCCGTGTTCTGTGGACGAGCTGGCGAGTGAAGCTTGGGGGCTGGACTACATGTATTTCGGCCAGGGCAACG
 GTGGGGGACCTCCCCGCAAGGGGATCCCCGAGCTTGAGCAGTATGACCCCCGGAGTTGGCTGACAGCAGTGGCA
 GAGTGGTCAGAGAGAAGTGGTCAGCAGACATGTGGCGCTTGGGCTGCCTCATTTGGGAAGTCTTCAATGGGCCCC
 TACCTCGGGCAGCAGCCCTACGCAACCCTGGGAAGATCCCCAAAACGCTGGTGGCCCAATTACTGTGAGCTGGTGG
 GAGCAAAACCCCAAGTGCTGCCAACCAGCCCCGCTTCTGTCAGAACTGCCGGGCACCTGGTGGCTTCATGAGCA
 ACCGCTTTGTAGAAACCAACCTCTTCTGAGGAGATTGAGATCAAAGAGCCAGCCGAGAAGCAAAAATTCTTCC
 AGGAGCTGAGCAAGAGCCTGGACGCATTCCCTGAGGATTTCTGTGCGCACAAGGTGCTGCCCCAGCTGCTGACCG
 CCTTCGAGTTTCGGCAATGCTGGGGCCGTTGTCTCAGCCCCCTCTTCAAGGTGGGCAAGTTCTTGAGCGCTGAGG
 AGTATCAGCAGAAGATCATCCCTGTGGTGGTCAAGATGTTCTCATCCACTGACCGGGCCATGCGCATCCGCCTCC
 TGCAGCAGATGGAGCAGTTTATCCAGTACCTTGACGAGCCAACAGTCAACACCCAGATCTTCCCCACGTCTGAC
 ATGGCTTCTTGACACCAACCCTGCCATCCGGGAGCAGACGGTCAAGTCCATGCTGCTCCTGGCCCCAAAGCTGA
 ACGAGGCCAACCTCAATGTGGAGCTGATGAAGCACTTTGCACGGCTACAGGCCAAGGATGAACAGGGCCCCATCC
 GCTGCAACACCACAGTCTGCCTGGGCAAAATCGGCTCCTACCTCAGTGCTAGCACCAGACACAGGGTCTTACCT
 CTGCCTTCAGCCGAGCCACTAGGGACCCGTTTGACCGTCCCGGGTTCGCGGTGCTCTGGGCTTTGCTGCCACCC
 ACAACCTCTACTCAATGAACGACTGTGCCCAGAAGATCCTGCCTGTGCTCTGCGGTCTCACTGTAGATCCTGAGA
 AATCCGTGCGAGACCAGGCCTTCAAGGCCATTTCGGAGCTTCTGTCCAAATTGGAGTCTGTGTCGGAGGACCCGA
 CCCAGCTGGAGGAAGTGGAGAAGGATGTCCATGCAGCCTCCAGCCCTGGCATGGGAGGAGCCGCAGCTAGCTGGG
 CAGGCTGGGCGGTGACCGGGGTCTCCTCACTACCTCCAAGCTGATCCGTTTCGCACCCAACCACTGCCCAACAG
 AAACCAACATTTCCCAAAGACCCACGCCTGAAGGCCACTGGGAGACGCAGGAGGAGGACAAGGACACAGCAGAGG
 ACAGCAGCACTGCTGACAGATGGGACGACGAAGACTGGGGCAGCCTGGAGCAGGAGGCCGAGTCTGTGCTGGCCC
 AGCAGGACGACTGGAGCACCGGGGGCCAAGTGAGCCGTGCTAGTCAGGTCAGCAACTCCGACCACAAATCCTCCA
 AATCCCCAGAGTCCGACTGGAGCAGCTGGGAAGCTGAGGGCTCCTGGGAACAGGGCTGGCAGGAGCCAAGCTCCC
 AGGAGCCACCTCCTGACGGTACACGGCTGGCCAGCGAGTATAACTGGGGTGGCCCAGAGTCCAGCGACAAGGGCG
 ACCCCTTCGCTACCTGTCTGCACGTCCCAGCACCCAGCCGAGGCCAGACTCTTGGGGTGAGGACAACCTGGGAGG
 GCCTCGAGACTGACAGTCGACAGGTCAAGGCTGAGCTGGCCCGGAAGAAGCGCGAGGAGCGGCGGGAGATGG
 AGGCCAAACGCGCCGAGAGGAAGGTGGCCAAGGGCCCCATGAAGCTGGGAGCCCGGAAGCTGGACTGAACCGTGG
 CGGTGGCCCTTCCCGGCTGCGGAGAGCCCCGCCCCACAGATGTATTTATTGTACAAACCATGTGAGCCCGGCCGGC
 CCAGCCAGGCCATCTCAGTGTACATAATCAGAGCCACAATAAATTCTATTTAC

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FIGURE 3294

CAGAGACTGATGAGTGCCGACTGAACCAGAACATCTGTGGCCACGGAGAGTGCGTGCCGGGCCCCCTGACTACT
CCTGCCACTGCAACCCCGGCTACCGGTACATCCCCAGCACCGCTACTGCGTGGATGTGAACGAGTGCGAGGCAG
AGCCCTGTGGCCCGGGGAGGGGCATCTGCATGAACACCGGCGGCTCCTACAATTGCCACTGCAACCGCGGCTACC
GCCTGCACGTGGGCGCCGGGGGGCGCTCGTGCGTGACCTGAACGAATGCGCCAAGCCCCACCTGTGCGGCGACG
GCGGCTTCTGCATCAACTTTCCCGGTCACTACAAGTGCAACTGCTACCCCGGCTACCGGCTCAAAGCCTCCCGGC
CTCCTGTGTGCGAAGACATCGACGAGTGCCGGGACCCAAGCTCTTGCCCGGATGGCAAATGCGAGAACAAGCCCG
GGAGCTTCAAGTGATCGCCTGTGAGCCTGGCTACCGCAGCCAGGGGGGCGGGGCTGTGCGGACGTGAACGAGT
GCGCCGAGGGCAGCCTGTGCGCTGGCTGGTGCGAGAACCTCCCGGGCTCCTTCCGCTGCACCTGTGCCAGG
GCTACGCGCCCGCGCCCGACGGCCGAGTTGCTTGGATGTGGACGAGTGTGAGGCTGGGGACGTGTGTGACAATG
GCATCTGCAGCAACACGCCAGGATCTTTCCAGTGTGAGTGCCTCTCTGGCTACCATCTGTCCAGGGACCGGAGCC
ACTGCGAGGACATTGATGAGTGTGACTTCCCTGCAGCCTGCATTGGGGGTGACTGCATCAATACCAATGGCTCCT
ACAGATGTCTTTGCCCCCAGGGGCATCGGCTGGTGGGTGGCAGGAAATGCCAAGACATAGATGAGTGACGCCAGG
ACCCGAGCCTGTGCCTTCCCCATGGGGCTGCAAGAACCTTCAGGGCTCCTATGTGTGTGTCTGCGATGAGGGCT
TCACTCCCACCCAGGACCAGCACGGTTGTGAGGAGGTGGAGCAGCCCCACCACAAGAAGGAGTGCTACCTGAACT
TCGATGACACAGTGTTCTGCGACAGCGTATTGCCACCAACGTGACCCAGCAGGAGTGCTGCTGCTCTCTGGGGG
CCGGCTGGGGCGACCACTGCGAAATCTACCCCTGCCAGTCTACAGCTCAGCCGAGTTCCACAGCCTCTGCCAG
ACGGAAGGGCTACACCCAGGACAACAACATCGTCAACTACGGCATCCCAGCCCACCGTGACATCGACGAGTGCA
TGTTGTTTCGGGTGCGAGATTTGCAAGGAGGGCAAGTGCGTGAACACGCAGCCTGGCTACGAGTGCTACTGCAAGC
AGGGCTTCTACTACGACGGGAACCTGCTGGAATGCGTGGACGTGGACGAGTGCTTGGACGAGTCCAATGCCGGA
ACGGAGTGTGTGAGAACACGCGCGGGCGGCTACCGCTGTGCCGCGACGCCCCCTGCCGAGTACAGTCCCGCGCAGC
GCCAGTGCCTGAGCCCCGGAAGAGATGGACGTGGACGAGTGCCAGGACCCGGCAGCCTGCCGCCCTGGCCGCTGCG
TCAACCTGCCGGGCTCCTACCGCTGCGAGTGTGCCCCGCCCTGGGTGCCCGGGCCCTCCGGCCGCGATTGCCAGC
TCCCCGAGAGCCCGGCCGAGCGTGCCCCGGAGCGGCGGACGTGTGCTGGAGCCAGCGCGGAGAGGACGGCATGT
GCGCTGGCCCCCTGGCCGGGCTGCCCTCACCTTCGACGACTGCTGCTGCCGCCAGGGCCGCGGCTGGGGCGCCC
AATGCCGACCGTGCCCGCCGCGCGGCGCGGGGTCCATTGCCCGACATCGCAGAGCGAGAGCAATTCCTTCTGGG
ACACAAGCCCCCTGCTGTTGGGGAAGCCCCAAGAGATGAGGACAGTTCAGAGGAGGATTCAGACGAGTGTGCT
GCGTGAGTGGCCGCTGCGTGCCGCGGGCGGGCGGCGCGTGTGCGAGTGTCCCGCGGCTTCCAGCTCGACGCCT
CCCGCGCCCGCTGCGTGGATATCGACGAGTGCCGAGAGCTGAACCAGCGCGGGCTGCTGTGCAAGAGCGAGCGCT
GCGTGAACACCAGCGGCTCCTTCCGCTGCGTCTGCAAAGCCGGCTTCGCGCGCAGCCGCCCGCACGGGGCCTGCG
TTCCCCAGCGCCGCGCTGACGCCGCCGACGCCGCCCTCGGCCAGACCTCGGTGATCACTGAGGGATTTCCGCG
AGCTCGGCCTCACTTCTGCCCGACTTGTGGCTCGGACCCAGGGACCTTCAGGGCCCGCAGACCTCCCGGCGCC
TTGAGACCCGAGGCGCCCTACCGCCCCCTCCCGGTTAGCGGGCGGTTGTAAGGTCTCCGGCGGGCGCTGCC
TGCTTCTCCAGAGGGTGTTCCTAGAACTGATAAATCAGATCGTGCTCTTTACCTTGCTTTTCG

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FIGURE 3295

CTCCCAAAGCAGAATTGCAGCTGCCGCCGCCGCCACCTCCAGGCCACTATGCGCCTGGGGCTGCCAGGAGCTT
CAGGCCAAGTTGGCAGAGATCGGAGCTCCGATCCAGGGTAATCGCGAGGAGCTGGTGGAGCGGCTGCAGAGCTAC
ACCCGCCAGACTGGCATCGTGCTGAATCGGCCGGTTTTGAGAGGGGAAGATGGGGACAAAGCCGCTCCACCTCCC
ATGTCGGCACAGCTCCCTGGAATTCCCATGCCACCACCACCTTTGGGACTCCCCCTCTGCAGCCTCCTCCGCCA
CCCCACCACCTCCACCAGGCCTTGGCCTTGGCTTTCCTATGGCCCCACCCACCAAATTTGGGGCCCCCGCCTCCT
CTCCGTGTGGGTGAGCCAGTGGCACTGTCAGAGGAGGAGCGGCTGAAGTTGGCTCAGCAGCAGGCGGCATTGCTG
ATGCAGCAGGAGGAGCGTGCCAAGCAGCAGGGAGATCATTGCTGAAGGAACATGAGCTCTTGGAGCAGCAGAAG
CGGGCAGCTGTGTTACTGGAGCAGGAACGACAGCAGGAGATTGCCAAGATGGGCACCCCACTCCCTCGGCCCCCA
CAAGACATGGGCCAGATTGGTGTGCGCACTCCTCTGGGTCTCGAGTAGCTGCTCCAGTGGGCCCAGTGGGCCCC
ACTCCTACAGTTTTGCCCATGGGAGCCCCCTGTTCCTCGGCCCTCGTGGTCCCCACCGCCCCCTGGAGATGAGAAC
AGAGAGATGGATGACCCCTCTGTGGGCCCAAGATCCCCAGGCTTTGGAGAAGATCCTGCAGCTGAAGGAGAGC
CGCCAGGAAGAGATGAATTCTCAGCAGGAGGAAGAGGAAATGGAACAGATGCTCGCTCGTCCCTGGGCCAGTCA
GCGTCAGAGACTGAGGAGGACACAGTGTCCGTATCTAAAAAGGAGAAAAACCGGAAGCGTAGGAACCGAAAGAAG
AAGAAAAAGCCCCAGCGGGTGCAGGGGTGTCTCTGAGAGCTCTGGGGACCGGGAGAAAGACTCAACCCGGTCC
CGTGGCTCTGATTCCCCAGCAGCTGATGTTGAGATTGAGTATGTGACTGAAGAACCTGAAATTTACGAGCCCAAC
TTTATCTTCTTTAAGAGGATCTTTGAGGCTTTTAAGCTCACTGATGATGTGAAGAAGGAGAAAGAGAAAGAGCCA
GAGAAACTTGACAACTGGAGAACTCTGCAGCCCCCAAGAAGAAGGATTGGAAGAGGAGCACAAGGACAGTGAT
GATGACAGCAGTGATGACGAGCAGGAAAAGAAGCCAGAAGCCCCCAAGCTGTCCAAGAAGAAGTTGCGCCGAATG
AACCCTTCACTGTGGCTGAAGTCAAGCAGCTGGTGGCTCGGCCCGATGTGCTGGAGATGCACGATGTGACAGCG
CAGGACCCTAAGCTCTTGGTTCACCTCAAGGCCACTCGGAACCTCTGTGCCTGTGCCACGCCACTGGTGTTTTAAG
CGCAAATACCTGCAGGGCAAACGGGGCATTGAGAAGCCCCCTTCGAGCTGCCAGACTTCATCAAACGCACAGGC
ATCCAGGAGATGCGAGAGGCCCTGCAGGAGAAGGAAGACAGAAGACCATGAAGTCAAAAATGCGAGAGAAAGTT
CGGCCTAAGATGGGCAAAATTGACATCGACTACCAGAACTGCATGATGCCTTCTTCAAGTGGCAGACCAAGCCA
AAGCTGACCATCCATGGGGACCTGTACTATGAGGGGAAGGAGTTGAGACACGACTGAAGGAGAAGAAGCCAGGA
GATCTGTCTGATGAGCTAAGGATTTCTTGGGGATGCCAGTAGGACCAAAATGCCCACAAGGTCCCTCCCCATGG
CTGATTGCCATGCAGCGATATGGACCACCCCATCGTATCCCAACCTGAAAATCCCTGGGGCTGAAGTCCGCCATC
CCTGAGAGCTGTTTCTTTGGGTACCATGCTGGTGGCTGGGGCAAACCTCCAGTGGATGAGACTGGGAAACCGCTC
TATGGGGACGTGTTTGGGAACCAATGCTGCTGAATTTAGACCAAGACTGAGGAAGAAGAGATTGATCGGACCCCT
TGGGGGGAAGTGAACCATCTGATGAAGAATCCTCAGAAGAAGAGGAAGAGGAAGAAAGTGAAGACAAACCA
GATGAGACAGGCTTTATTACCCCTGCAGACAGTGGCCTTATCACTCCTGGAGGCTTTTATCAGTGCCTGCTGGA
ATGGAGACCCCTGAAGTCAATTGAGCTGAGGAAGAAGAAGATTGAGGAGGCGATGGACGGAAGTGAACACCTCAG
CTCTTCACTGTGTTGCCAGAGAAGAGAACAGCCACTGTTGGAGGGGCCATGATGGGATCAACCCACATTTATGAC
ATGTCCACGGTTATGAGCCGGAAGGGCCCGGCTCCTGAGCTGCAAGGTGTGGAAGTGGCGCTGGCGCCTGAAGAG
TTGGAGCTGGATCCTATGGCCATGACCCAGAAGTATGAGGAGCATGTGCGGGAGCAGCAGGCTCAAGTAGAGAAG
GAGGACTTCAGTGACATGGTGGCTGAGCACGCTGCCAAACAGAAGCAAAAAAACGGAAGCTCAGCCCCAGGAC
AGCCGTGGGGGAGCAAGAAATATAAGGAGTTCAAGTTTATAGTCCCCCTCACACTAGCCCTTTTTTTGGCCCTAC
GTCTGGATGCCTGGGCTTCACACAAGAACCACCTCTCCCGCAGTTCCCAAGGACTTGTCAATTCATGTTCTTATT
TTAGACCTGTTTTGTAAATAAAGCTGTTTCCCAAGGAAGAAGAGATGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3296

MAPGAAQELQAKLAEIGAPIQGNREELVERLQSYTRQTGIVLNRPVLRGEDGDKAAPPPMSAQLPGIPMPPPPLG
LPPLQPPPPPPPPPPGLGLGFPMAPPPNLGPPPPPLRVGEPVALSEERLKLAAQQQAALLMQQEERAKQQGDHSLK
EHELLEQQKRAAVLLEQERQQEIAKMGTVPVRPPQDMGQIGVRTPLGPRVAAPVGPVGPPTPTVLPMGAPVPRPRG
PPPPPGDENREMDDPSVGPKIPQALEKILQLKESRQEEMNSQEEEEEMETDARSSLGQSASETEEDTVSVSKKEK
NRKRRNRKKKKKPQVRGVSSSESSGDREKDSRSGSDSPAADVEIEYVTEEPEIYEPNFIFFKRIFEAFKLTD
VKKEKEKEPEKLDKLENSAAPKKKGFEHHKSDDDSSDDEQEKKEAPKLSKKKLRRMNRFTVAELKQLVARPD
VEMHDVTAQDPKLLVHLKATRNSVPVPRHWCFFKRKYLGKRGIEKPPFELPDFIKRTGIQEMREALQEKEEQKT
MKSMMREKVRPKMGKIDIDYQKLHDAFFKWQTKPKLTIHGDLYYEGKEFETRLKEKKPGDLSDELRLSLGMPVGP
NAHKVPPPWLIAMQRYGPPPSYPNLKIPGLNSPIPESCSFGYHAGGWGKPPVDETGKPLYGDVFGTNAAEFQTKT
EEEEIDRTPWGELEPSDEESSEEEEEESDEDKPDETGFI TPADSLITPGGFSSVPAGMETPELIELRKKKIEE
AMDGSETPQLFTVLPEKRTATVGGAMMGSTHIYDMSTVMSRKGPAPELQGVEVALAPEELELDPAMTQKYEEHV
REQQAQVEKEDFSDMVAEHAAKQKQKKRKAQPQDSRGGSKKYKEFKF

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FIGURE 3297

GGAGTTTCGCCGCCGCAGTCTTCGCCACCATGCGGCCCTACACCGTGGTCTATTTCCAGTTTCGAGGCCGCTGCG
 CGGCCCTGCGCATGCTGCTGGCAGATCAGGGCCAGAGCTGGAAGGAGGAGGTGGTGACCGTGGAGACGTGGCAGG
 AGGGCTCACTCAAAGCCTCCTGCCTATACGGGCAGCTCCCCAAGTTCCAGGACGGAGACCTCACCTGTACCAGT
 CCAATACCATCCTGCGTCACCTGGGCCGCACCCCTGGGGCTCTATGGGAAGGACCAGCAGGAGGCAGCCCTGGTGG
 ACATGGTGAATGACGGCGTGGAGGACCTCCGCTGCAAATACATCTCCCTCATCTACACCAACTATGAGGCGGGCA
 AGGATGACTATGTGAAGGCACTGCCCCGGGCAACTGAAGCCTTTTGAGACCCTGCTGTCCCAGAACCAGGGAGGCA
 AGACCTTCATTGTGGGAGACCAGATCTCCTTCGCTGACTACAACCTGCTGGACTTGCTGCTGATCCATGAGGTCC
 TAGCCCCTGGCTGCCTGGATGCGTTCCCCCTGCTCTCAGCATATGTGGGGCGCCTCAGCGCCCCGGCCCAAGCTCA
 AGGCCTTCCTGGCCTCCCCTGAGTACGTGAACCTCCCCATCAATGGCAACGGGAAACAGTGAGGGTTGGGGGGAC
 TCTGAGCGGGAGGCAGAGTTTGCCTTCCTTTCTCCAGGACCAATAAAATTCTAAGAGAGCT

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FIGURE 3298

MPPYTVVYFPVRGRCAALRMLLADQGQSWKEEVTVETWQEGSLKASCLYGQLPKFQDGDLTLYQSNTILRHLGR
TLGLYGKDQQEAALVDMVNDGVEDLRCKYISLIYTNYEAGKDDYVKALPGQLKPFETLLSQNQGGKTFIVGDQIS
FADYNLLDLLLIHEVLAPGCLDAFPLLSAYVGRLSARPKLKAFLASPEYVNLPI NGNGKQ

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FIGURE 3299

ATCGCGCCAGTTCCTCAGCCTCAGTGCTATGAAGGTGACAGCGTGAGGTGACCCATCTGGCCCCGCCGCGATGCTG
GCAACACGGCGGGCTGCTCGGCTGGTCGCTTCCCGCGCGGGTATCTGTGCGTTTCAGCGGCGACACGACAGCACCC
AAGAAAACCTCATTGCGCTCGCTGAAGGATGAAGACCGGATTTTCACCAACCTGTACGGCCGCCATGACTGGAGG
CTGAAAGGTTCCCTGAGTCGAGGTGACTGGTACAAGACAAAGGAGATCCTGCTGAAGGGGCCCCGACTGGATCCTG
GGCGAGATCAAGACATCGGGTTTGAGGGGCGCTGGAGGCGCTGGCTTCCCACTGGCCTCAAGTGGAGCTTCATG
AATAAGCCCTCAGATGGCAGGCCCAAGTATCTGGTGGTGAACGCAGACGAGGGGGAGCCGGGCACCTGCAAGGAC
CGGGAGATCTTACGCCATGATCCTCACAAGCTGCTGGAAGGCTGCCTGGTGGGGGGCCGGGCCATGGGCGCCCGC
GCTGCCTATATCTACATCCGAGGGGAATTCTACAATGAGGCCTCCAATCTGCAGGTGGCCATCCGAGAGGCCTAT
GAGGCAGGTCTGATTGGCAAGAATGCTTGTGGCTCTGGCTATGATTTTGACGTGTTTGTGGTGC CGGGGCTGGG
GCCTACATCTGTGGAGAGGAGACAGCGCTCATCGAGTCCATTGAGGGCAAGCAGGGCAAGCCCCGCCTGAAGCCC
CCCTTCCCCGAGACGTGGGAGTGTGTTGGCTGCCCCACAACGTGGCCAACGTGGAGACAGTGGCAGTGTCCCC
ACAATCTGCCGCCGTGGAGGTACCTGGTTTGTGGCTTTGGCAGAGAACGCAACTCAGGCACCAAACCTATTCAAC
ATCTCTGGCCATGTCAACCACCCTTGCACTGTGGAGGAGGAGATGTCTGTGCCCTTGAAAGAACTGATTGAGAAG
CATGCTGGGGGTGTACGGGCGGCTGGGACAACCTCCTTGCTGTGATCCCTGGCGGCTCGTCTACCCCACTGATC
CCCAAGTCTGTGTGTGAGACGGTGCTGATGGACTTCGATGCGCTGGTGCAGGCACAGACAGGCCTGGGCACAGCT
GCGGTGATCGTCATGGACCGCTCGACGGACATCGTGAAAGCCATCGCCCGCCTCATTGAGTTCTATAAGCACGAG
AGCTGTGGCCAGTGTACCCCATGCCGTGAGGGTGTGGACTGGATGAACAAGGTGATGGCACGTTTCGTGAGGGGG
GATGCCCCGGCCGGCCGAGATCGACTCCCTGTGGGAGATCAGCAAGCAGATAGAAGGCCATACGATTTGTGCTCTG
GGTGACGGGGCCGCTGGCCTGTGCAGGGTCTGATCCGCCACTTTCGGCCGGAGCTCGAGGAGCGGATGCAGCGG
TTTGCCAGCAGCATCAGGCCCCGAGGCTGCCTCTTAGCCCCACCACCCTGGCCTGCTGTCTGCGTCTATCCAT
GTGGAATGCTGGACAATAAAGCGAGTGCTGCCACCCTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3300

MLATRRLLGWSLPARVSVRFSGDITAPKKTSTFGSLKDEDRIFTNLYGRHDWRLKGSLSRGDWYKTKEILLKGPDW
ILGEIKTSGLRGRGGAGFPTGLKWSFMNKPSDGRPKYLVNADGEPEGTCKDREILRHDPHKLLEGCLVGGRAMG
ARAYIYIRGEFYNEASNLQVAIREAYEAGLIGKNACSGYDFDVFVVRGAGAYICGEETALIESIEGKQGKPR
KPPFPADVGVFGCPTTVANVETVAVSPTICRRGGTWFAGFGRERNSTKLFNISGHVNHPCVVEEEMSVPLKELI
EKHAGGVTTGGWDLNLLAVIPGGSSTPLIPKSVCEVLMDFDALVQAQTGLGTAIVMDRSTDIVKAIARLIEFYK
HESCGQCTPCREGVDWMNKVMARFVRGDARPAEIDSLWEISKQIEGHTICALGDGAAPVQGLIRHFRPELEERM
QRFAQQHQRQAAS

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FIGURE 3301

GGCACGAGGGCGCGCAAGGCACCGGTGGCAGCGGCGACGGCAGCTGCGACAGCAACCCCTGCTGGGCGGAACTG
GGCAGAGCGGAGCAGACGTCTGAAGCAGCGCGAGTGAGGCGCGAGGGTAGCGCCCGCGCCCGGGAAGACCCCTCG
GCGCGAACCAGGAGCCAGCCCGGGTCCCGGTTCCCAAGGCCCGCCTCTAGGGCCTGGGGACTAATCGGATTG
AGAGCGCGCCGGCCCGGGCCGGAACCTCGCCAATTGCGGAGGGCGGTGGCCACCGCCCAATCCGGAGCAGACAGG
TGCAGAGTCCGGAAGGCGGAGGCCAATCGGCGGCGGTTGCGACCTGCTGGGGCAGGTCTCGGCCAATAAGGAGGC
TCGAGTGACATCTTCGCGCACCAATCGGGAGTGAGGGAGCATTCGTGCCCGCTCGCCCTTCGGCCAGACCTCTA
TTTACCAGGGGCGTGACAGCCCGCTTGCCAATCAGAGCGCGGCTGAGCGGCCCCGAGCCAACCCCGAGGAGCGG
CCGGCTGGCGTCCGCGCGCGCCAGGAGTTGGGGATGTCCTACAAACCCATCGCCCTGCTCCCAGCAGCACCCCT
GGCTCCAGCACCCCTGGGCGGGGCACCCCGTCCCTACAGGAAGCGTCCCGTCGCCGTGGGCTCAGTGCCAGGA
GCCGGCGCTCCTTTTCAGACCGCTGTTTAACGACTTTGGACCGCCTTCCATGGGCTACGTGCAGGCGATGAAGCCA
CCCGGCGCCAGGGCTCCAGAGCACCTACACGGACCTGCTGTGAGTCATAGAGGAGATGGGCAAAGAGATCCGG
CCTACCTATGCTGGCAGCAAGAGCGCCATGGAGCGCCTGAAGAGAGGTATCATCCATGCCCGGGCCCTAGTCAGA
GAGTGCCTGGCAGAGACAGAGCGGAACGCCCGCACGTAACAGGAAGCGCCTCGGCCTCAGCGTCTGGACCTATCC
GGCCACTGCAGAGCACCCGCTTCTCCCTGGCCTTCATCCCGAGTTGCACTAACCATCCTGGGCTTCCTGTCTGT
GTCCCTTGGTGGGTCCCTCCAGGAACCAAGGAGTGGCCCTCCAGGTGGCAGCACTAAGGACACCCCCCACAAC
AAGAGTTAGCAGCGAGGTCCCATGAGTCCACCCATGACCTGCCGACAGTGTTGCCACCGGAACTTTTGTGGC
CCCTACCGCTCAGCCCTTCCAGCACTTCTCCACTTTGTCCCGAGCCTCCTTCTCCCCCAGCAGGGGCACAGGC
CTGGCACCTCCCTGCCTTGTGTCTGAGCCATAGTGACTCTTTATCTGTGTGCTTTTGCTAAATATGCCCTTT
TTATATTAATAAAAGATGATTTGGAGTTGTGCTCTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3302

MSYKPIAPAPSSSTPGSSTPGPGTFVPTGSVPSPSGSVPGAGAPFRPLFNDFGPPSMGYVQAMKPPGAQGSQSTYT
DLLSVIEEMGKEIRPTYAGSKSAMERLKRGI I HARALVRECLAETERNART

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[illegible]

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FIGURE 3303B

CCAGACCTACATCGTGGGCCGTGCCGTGCGGAAGCTACAGGCGCAGTGCCAGTTCCTGTCAGACGGCTATGTGGC
CCACCTGGGCCAGCTGGAAGCGGGCTCGCACTCGCATGCCTCCTCGGGACCCCGAGAGCTGCCTTGGGCAAGAG
CAGCTATGGTGTGGCTGCCCCGTGGACTTCCTGCGCAAACAGAGCCAGCTGCTTCGCTCGAGGGGCCCCAGCCA
GGCGGAGCGTGAGGGCCCGGGAACACCACCCACCACCCTGGCACGGGGCAAAGCACGGAGCATCAGCCTGAAGCT
GGACAGCGAGGAGTGAGGCCCACACCAGCCTGGACCTGGGTTATTTATTGACACACCCAAGGGGCCGAGGGGCT
GCGTGTGGGAGGCTGGGGACCCAGACTTTTGGCCCCAGCGCTGGCCCCCCCAGCCCCACACCCTATATCTCCGTG
TGCTCCTCGGTGTTACTTCCCTTTCATATGAGGGGACCCAGCGCCGGGGGAGGGAGGAGGGCGTGGGCATGGGC
GCAGAGGCTTTTCCAGTGTGTATAAATCCATGAAAATAAACGCCACCTGCACCCC

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FIGURE 3304

GC GGCGCCTAGTCCC GG GCTGGCGGGAGTGCAGTTCTGAGTCCCGCCCGGCGTGC GCGGAGCGGGGCAGCCAGCA
GCGGAGGCGCGGCGCGCAGCACACCCGGGGACCATGGGCTCCATGTTCCGGAGCGAGGAGGTGGCCCTGGTCCAG
CTCTTTCTGCCACAGCGGCTGCCTACACCTGCGTGAGTCGGCTGGGCGAGCTGGGCCTCGTGAGATTTCAGAGAC
CTCAACGCCTCGGTGAGCGCCTTCCAGAGACGCTTTGTGGTTGATGTTCCGGCGCTGTGAGGAGCTGGAGAAGACC
TTCACCTTCCTGCAGGAGGAGGTGCGGCGGGCTGGGCTGGTCTGCCCCGCCAAAGGGGAGGCTGCCGGCACCC
CCACCCCGGGACCTGCTGCGCATCCAGGAGGAGACGGAGCGCCTGGCCCAGGAGCTGCGGGATGTGCGGGGCAAC
CAGCAGGCCCTGCGGGCCCAGCTGCACCAGCTGCAGCTCCACGCCGCCGTGCTACGCCAGGGCCATGAACCTCAG
CTGGCAGCCGCCACACAGATGGGGCCTCAGAGAGGACGCCCTGCTCCAGGCCCGGGGGGCGCACCAGGAC
CTGAGGGTCAACTTTGTGGCAGGTGCCGTGGAGCCCCACAAGGCCCTGCCCTAGAGCGCTGCTCTGGAGGGCC
TGCCGCGGCTTCCTCATTGCCAGCTTCAGGGAGCTGGAGCAGCCGCTGGAGCACCCCGTGACGGGCGAGCCAGCC
ACGTGGATGACCTTCCTCATCTCCTACTGGGGTGAGCAGATCGGACAGAAGATCCGCAAGATCACGGACTGCTTC
CACTGCCACGTCTTCCCGTTTCTGCAGCAGGAGGAGGCCCGCTCGGGGCCCTGCAGCAGCTGCAACAGCAGAGC
CAGGAGCTGCAGGAGTCTCGGGGAGACAGAGCGGTTCTTGAGCCAGGTGCTAGGCCGGGTGCTGCAGCTGCTG
CCGCCAGGGCAGGTGCAGGTCCACAAGATGAAGGCCGTGTACCTGGCCCTGAACCAAGTGCAGCGTGAGCACACG
CACAAGTGCCCTCATTGCCGAGGCTGGTGCTCTGTGCGAGACCTGCCCGCCCTGCAGGAGGCCCTGCGGGACAGC
TCGATGGAGGAGGAGTGAGTGCCGTGGCTACCCGCATCCCCTGCCGGGACATGCCCCCACACTCATCCGCACC
AACCCTTCACGGCCAGCTTCAGGGCATCGTGGATGCCACGGCGTGGGCCGCTACCAAGGAGTCAACCCCGCT
CCCTACACCATCATCACCTTCCCTTCTGTGTTGCTGTGATGTTCCGGGATGTGGGCCACGGGCTGCTCATGTTT
CTCTTCGCCCTGGCCATGGTCTTGCAGAGAACCGACCGGCTGTGAAGGCCGCGCAGAACGAGATCTGGCAGACT
TTCTTCAGGGGCCGCTACCTGCTCTGCTTATGGGCCTGTTCTCCATCTACACCGGCTTCATCTACAACGAGTGC
TTCAGTCGCGCCACCAGCATCTTCCCTCGGGCTGGAGTGTGGCCGCCATGGCCAACCAAGTCTGGCTGGAGTGAT
GCATTCCCTGGCCAGCACACGATGCTTACCTTGATCCCAACGTCACCGGTGTCTTCTGGGACCCTACCCCTTT
GGCATCGATCCTATTTGGAGCCTGGCTGCCAACCCTTGAGCTTCCTCAACTCCTTCAAGATGAAGATGTCCGTC
ATCCTGGGCGTCTGTGCACATGGCCTTTGGGGTGGTCTCGGAGTCTTCAACCACGTGCACTTTGGCCAGAGGCAC
CGGCTGCTGCTGGAGACGCTGCCGGAGCTCACCTTCTGCTGGGACTCTTCGGTTACCTCGTGTTCCTAGTCATC
TACAAGTGGCTGTGTGCTGGGCTGCCAGGGCCGCTCGGCCCCCAGCATCCTCATCCACTTCATCAACATGTTT
CTCTTCTCCACAGCCCCAGCAACAGGCTGCTCTACCCCCGGCAGGAGGTGGTCCAGGCCACGCTGGTGGTCTG
GCCTTGGCCATGGTGCCCATCCTGCTGCTTGGCACACCCCTGCACCTGCTGCACCGCCACCGCCGCCCTGCGG
AGGAGGCCCGCTGACCGACAGGAGGAAAACAAGGCCGGGTGCTGGACCTGCCTGACGCATCTGTGAATGGCTGG
AGCTCCGATGAGGAAAAGGCAGGGGGCTGGATGATGAAGAGGAGGCCGAGCTCGTCCCCCTCCGAGGTGCTCATG
CACCAGGCCATCCACACCATCGAGTTCTGCCCTGGGCTGCGTCTCCAACACCGCCTCCTACCTGCGCCTGTGGCC
CTGAGCCTGGCCACGCCCAGCTGTCCGAGGTTCTGTGGGCCATGGTGATGCGCATAGGCCTGGGCCTGGGCCGG
GAGGTGGGCGTGGCGGCTGTGGTGCTGGTCCCCATCTTTGCCGCCCTTGCCGTGATGACCGTGGCTATCCTGCTG
GTGATGGAGGGACTCTCAGCCTTCCTGCACGCCCTGCGGCTGCACTGGGTGGAATTCCAGAACAAGTTCTACTCA
GGCACGGGCTACAAGCTGAGTCCCTTCACCTTCGCTGCCACAGATGACTAGGGCCCACTGCAGGTCTGCCAGAC
CTCCTTCTGACCTCTGAGGCAGGAGGAATAAAGACGGTCCGCCCTGGCAGTGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3305

MGSMFRSEEEVALVQLFLPTAAAYTCVSR LGELGLVEFRDLNASVSASFQRRFVVDVRRCEELEKTFTFLQEEVRRRA
GLVLPPP KGRLPAPPPRDLRLRIQEETERLAQELRDVRGNQQALRAQLHQLQLHAAVLRQGHEPQLAAAHTDGASE
RTPLLQAPGGPHQDLRVNFVAGAVEPHKAPALERLLWRACRGFLIASFRELEQPLEHPVTGEPATWMTFLISYWG
EQIGQKIRKITDCFHCHVFPFLQQEEARLGALQQQQSQELQEV LGETERFLSQVLGRVLQLLPPGQVQVHKMK
AVYLALNQCSVSTTHKCLIAEAWCSVRDLPALQEALRDSMEEGVSAVAHRIPCRDMPTLIRTNRFTASFQGI V
DAYGVGRYQEVNPAPYTIITFFPFLFAVMFGDVGHLLMFLFALAMVLAENRPAVKAAQNEIWQTFFRGRYLLLLM
GLFSIYTGFIYNECFSRATSIFPSGWSVAAMANQSGWSDAFLAQHTMLTLDPNVTGVFLGPYPFGIDPIWSLAAN
HLSFLNSFKMKMSVILGVVHMAFGVVLGVFNHVFHGQRHRLLETLPELTFLLGLFGYLVFLVIYKWLCVWAARA
ASAPSILIHFINMFLFSHSPSNRLLYPRQEVVQATLVVLALAMVPI LLLGTPLHLLHRHRRRLRRRPADRQEENK
AGLLDLPDASVNGWSSDEEKAGGLDDEEAELVPSEVLMHQAHTIEFCLGCVSNTASYLRLWALSLAHAQLSEV
LWAMVMRIGLGLGREVGVAAVVLVPIFAAFVMTVAILLVMEGLSAFLHALRLHWVEFQNKFYSGTGYKLSPTF
AATDD

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FIGURE 3306

GGACGCCCCCTGCTCCAGGCCCCCGGGGGGCCGACCAGGACCTGAGGGTCAAGTGAGTGAGGGATGACCTCATGC
CCTTTCTGGCCAGCCCAGAACCCCTGGCCAGTCGCTGGGCTGGGCCAGGCTGAGCTCCGACTCCTTGTCCAGTGC
TCTCCCCAGGCTGGCCCCGCCTCCTCCTTCAGGCCCCGGAACCTCCACAGTCCCAAGCCCTAGCCCTAGGGGGTT
CTCCTCTTCTGGTCTTGCCCGGGAGGCCCTCTGCCTTCCCCTGTGGGCAGGGCCAGTGTGCCCAATTGCCCGATT
GCCCCGTGCTGGGCAGGGTCTTGCCCGGGGGGCCCTGGTGGGGGAGGCAGGGCAGGAGGTGGAGCAGCCCTGCCCA
GCCCCGTGGCCGCCAGCTTTGTGGCAGGTGCCGTGGAGCCCCACAAGGCCCTGCCCTAGAGCGCCTGCTCTGGA
GGGCCTGCCGCGGCTTCTCATTGCCAGCTTCAGGGAGCTGGAGCAGCCGCTGGAGCACCCCGTGACGGGCGAGC
CAGCCACGTGGATGACCTTCTCATCTCCTACTGGGGTGAGCAGATCGGACAGAAGATCCGCAAGATCACGGACT
GCTTCCACTGCCACGTCTTCCCGTTTCTGCAGCAGGAGGAGGCCCGCCTCGGGGCCCTGCAGCAGCTGCAACAGC
AGAGCCAGGAGCTGCAGGAGGTCTCGGGGAGACAGAGCGGTTCCTGAGCCAGGTGCTAGGCCGGGTGCTGCAGC
TGCTGCCGCCAGGGCAGGTGCAGGTCCACAAGATGAAGGCCGTGTACCTGGCCCTGAACCAAGTGCAGCGTGAGCA
CCACGCACAAGTGCCTCATTGCCGAGGCCGTGGTGTCTGTGCGAGACCTGCCCGCCCTGCAGGAGGCCCTGCCGG
ACAGCTCGATGGAGGAGGGAGTGAGTGCCGTGGCTCACCGCATCCCCTGCCGGGACATGCCCCCACACTCATCC
GCACCAACCGCTTACGGCCAGCTTCCAGGGCATCGTGGATGCCTACGGCGTGGGCCGCTACCAGGAGGTCAACC
CCGCTCCCTACACCATCATCACCTTCCCCTTCTGTTTGTGTGATGTTCCGGGATGTGGGCCACGGGCTGCTCA
TGTTCTCTTCGCCCTGGCCATGGTCCTTGCGGAGAACCGACCGGCTGTGAAGGCCGCGCAGAACGAGATCTGGC
AGACTTTCTTCAGGGGCGCTACCTGCTCCTGCTTATGGGCCGTGTCTCCATCTACACCGGCTTCATCTACAACG
AGTGCTTCAGTCGCGCCACCAGCATCTTCCCCTCGGGCTGGAGTGTGGCCGCCATGGCCAACCAAGTCTGGCTGGA
GTGATGCATTCTGGCCCAGCACACGATGCTTACCCTGGATCCCAACGTACCCGGTGTCTTCTGGGACCCCTACC
CCTTTGGCATCGATCCTATTTGGAGCCTGGCTGCCAACCACCTTGAGCTTCTCAACTCCTTCAAGATGAAGATGT
CCGTATCCTGGGCGTCTGTGCACATGGCCTTTGGGGTGGTCTCTCGGAGTCTTCAACCACGTGCACTTTGGCCAGA
GGCACCGGCTGCTGCTGGAGACGCTGCCGGAGCTCACCTTCTGCTGGGACTCTTCGGTTACCTCGTGTTCCTAG
TCATCTACAAGTGGCTGTGTGTCTGGGCTGCCAGGGCCGCCTCGGCCCCAGCATCCTCATCCACTTCATCAACA
TGTTCTCTTCTCCACAGCCCCAGCAACAGGCTGCTTACCCCCGGCAGGAGGTGGTCCAGGCCACGCTGGTGG
TCCTGGCCTTGGCCATGGTGCCATCCTGCTGCTTGGCACACCCCTGCACCTGCTGCACCGCCACCGCCGCCGCC
TGCGGAGGAGGCCCGCTGACCGACAGGAGGAAAACAAGGCCGGGTGCTGGACCTGCCTGACGCATCTGTGAATG
GCTGGAGCTCCGATGAGGAAAAGGCAGGGGGCCTGGATGATGAAGAGGAGGCCGAGCTCGTCCCCTCCGAGGTGC
TCATGCACCAAGCCATCCACACCATCGAGTTCTGCTGGGCTGCGTCTCCAACACCGCCTCCTACCTGCGCCTGT
GGGCCCTGAGCCTGGCCCACGCCAGCTGTCCGAGGTTCTGTGGGCCATGGTGTGCGCATAGGCCTGGGCCTGG
GCCGGGAGGTGGGCGTGGCGGCTGTGGTGTGTTCCCACTTTTGCCGCTTTGCCGTGATGACCGTGGCTATCC
TGCTGGTGATGGAGGACTCTCAGCCTTCTGCACGCCCTGCGGCTGCACTGGGTGGAATTCCAGAACAAGTTCT
ACTCAGGCACGGGCTACAAGCTGAGTCCCTTACCTTTCGTGCCACAGATGACTAGGGCCCACTGCAGGTCTGCTGC
CAGACCTCCTTCTGACCTCTGAGGCAGGAGAGGAATAAAGACGGTCCGCCCTGGCAGTGAACCAACCAAGTTCT
AAAAA

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FIGURE 3307

MTFLISYWGEQIGQKIRKITDCFHCHVFPFLQQEEARLGALQQLQQSQELQEVLGETERFLSQVLGRVLQLLPP
GQVQVHKMKAVYLALNQCSVSTTHKCLIAEAWCSVRDLPALQEALRDSSMEEGVSAVAHRIPCRDMPPTLIRTNR
FTASFQGIVDAYGVGRYQEVNPAPYTIITFPFLFAVMFGDVGHLLMFLFALAMVLAENRPAVKAAQNEIWQTFF
RGRYLLLLMGLFSIYTGFIYNECFSRATSIFPSGWSVAAMANQSGWSDAFLAQHTMLTLDPNVTGVFLGPYPFGI
DPIWSLAANHLSFLNSFKMKMSVILGVVHMAFGVVLGVFNHVHFGQRHRLLETLPELTFLLGLFGYLVFLVIYK
WLCVWAARAASAPSILIHFINMFLFSHSPSNRLLYPRQEVVQATLVVLALAMVPILLGTPHLLHRHRRRLRRR
PADRQEENKAGLLDLPDASVNGWSSDEEKAGGLDDEEEAELVPSEVLMHQAHTIEFCLGCVSNTASYLRLWALS
LAHAQLSEVLWAMVMRIGLGLGREVGVAAVVLVPIFAAFVMTVAILLVMEGLSAFLHALRLHWVEFQNKFYSGT
GYKLSPFTFAATDD

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FIGURE 3308

CGGCCGAGGCTGCGGCCATGGCGAGCATCTTCCCTGACGGTCACCTTAGGGCGGGCTGGCGTCCGCGTGCAGCCACA
GCATCCTGAGACCTTCGGGGCCCGGAGCAGCCTCCCTTTGGTCTGCTTCTCGAAGGTTCAATTCACAGAGCACTT
CATATCTACCAGGATATGTTCCCTAAAACATCCCTGAGTTCACCACCTTGGCCAGAAGTTGTTCTGCCAGACCCAG
TTGAGGAGACCAGACACCATGCAGAGGTCGTGAAGAAGGTGAATGAGATGATCGTCACGGGGCAGTATGGCAGGC
TCTTTGCCGTGGTGCACCTTGCCAGCCGCCAGTGGGAAGGTGACCTCTGAAGACCTGATCTTAATTGGAATGAAC
TAGACCTTGCGTGTGGAGAGAGAATTCGACTGGAGAAGGTCCTGCTGGTTGGGGCAGACAACCTTCACGCTGCTTG
GCAAGCCACTCCTCGGGTAAATGGCTGTGAAGTGCTGGGCTTTGTCTGGGGCTCCAGGGCTGGACATGCAGACAGT
GGTCACAGTGCAATTAGGCCAGAAAGGATCTTGTTTCGAGTAGAAGCCACAGTCATTGAAAAGACAGAATCATGGC
CAAGAATCATTATGAGATTCAGGAAAAGGAAAACTTCAAGAAGAAAAGAATCGTCACGACCCCGCAGACTGTCC
TCCGGATAAACAGCATTGAGATTGCTCCGTGTTTGTGTGATTACCGAGTTAATACTTACAAAAGGATAAAAATA
AACTCCTGCTTCCCAAGG

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FIGURE 3309

MAASSLTIVTLGRLASACSHSILRPSGPGAASLWSASRRFNSQSTSYLPGYVPKTSLSPPWPEVVLPDPVEETRH
HAEVVKKVNEMIVTGQYGRLFAVVHFAQRQWKVTSEDLILIGNELDLACGERIRLEKVLLVGADNFTLLGKPLL

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FIGURE 3310

GGCGCAGAAGCGGGACGTCGGCTTCTAGGGGCCCCAGGCCGGCGGCGGCGATGGCCTCGGCAGCTGTGGAGAGCTT
CGTGACCAAGCAACTGGACCTGCTGGAGCTTGAGAGAGACGCGGAGGTGGAGGAGCGCAGGTCCTGGCAGGAGAA
CATCTCTCTGAAAGAGCTCCAGAGCCGAGGCGTGTGTTTGTCTGAAGCTGCAGGTATCCAGCCAGCGCACTGGGCT
GTACGGACGGCTGCTGGTCACCTTTGAGCCCAGGCGATACGGGTCCGCGGCAGCTCTTCCCAGTAACAGCTTTAC
TTCTGGTGATATCGTGGGCTGTACGATGCTGCTAATGAGGGCAGTCAGCTGGCCACTGGGATCTTGACCCGGGT
CACCCAGAAGTCGGTCACGGTGGCCTTTGATGAGTCCCACGATTTCAGTTGAGCTTGACCGAGAGAATTCCTA
CAGACTGTTAAACTTTGCCAATGATGTCACCTTACAGGCGACTGAAAAAAGCCCTGATTGCTCTAAAGAAGTATCA
TTCTGGCCCAGCCTCCTCACTCATAGAAGTGCTCTTTGGCAGATCTGCTCCAGTCCTGCCAGTGAAATACACCC
GCTGACATTCTTCAACACCTGCCTGGACACCTCCCAGAAAGAAGCGGTTTCATTGCGCTGTCTCAGAAAGAACT
TGCCATCATCCATGGACCTCCTGGCACTGGGAAAACCACGACTGTGGTTGAGATCATTCTTCAAGCTGTGAAACA
AGGCTTAAAGGTTCTGTGCTGCGCCCCCTCCAACATCGCCGTGGACAATCTGGTGAGCGCCTGGCTCTGTGTAA
GCAGCGGATTCTGCGCCTGGGACACCCTGCCCGCCTCCTGGAGTCCATTACGACGACTCCCTGGATGCGGTTTT
AGCGCGGAGCGACAGTGCCAGATTGTTGCAGATATCAGGAAGGACATCGACCAGGTCTTTGTGAAAAACAACAAA
GACCCAGGATAAGAGAGAGAAAAGTAATTTTCGAAATGAAATTAAGCTGTTAAGAAAAGAACTGAAGGAGAGGGA
AGAAGCAGCTATGCTCGAGAGCCTCACTTCGGCAAACGTGGTCTTGAACAAACACAGGTGCGTCTGCCGATGG
CCCCCTGAAGTTGCTGCCGAGAGCTACTTCGACGTGGTGGTCATTGACGAGTGTGCCAGGCCCTCGAGGGCGAG
CTGCTGGATCCCCCTGCTGAAGGCCAGAAAGTGCATCCTGGCGGGCGATCACAAGCAGCTGCCCCCACCACAGT
CTCTACAAGGCTGCGCTGGCAGGACTGTCACTCAGCCTGATGGAACGCCTGGCTGAGGAGTACGGCGCGAGGGT
GGTGCGGACACTGACGGTGCAGTACCGCATGCACCAGGCTATCATGCGCTGGGCTCAGACACCATGTACCTTGG
GCAGCTCACAGCCCCTCTTCCGTGGCAAGGCACCTCCTGAGGGACCTCCCAGGTGTGGCTGCCACAGAAGAGAC
GGGTGTGCCCTGCTCTTGGTGGACACCGCCGGCTGCGGGCTGTTTGAGCTGGAGGAGGAGGACGAACAGTCGAA
AGGGAACCCTGGCGAAGTCCGCCTCGTCAGTTTGACATCCAGGCTCTGGTGGACGCTGGTGTTCAGCCCCTGA
CATTGCTGTGGTCTCGCCATACAACCTCCAGGTGGACCTGCTCAGACAGAGCCTTGTCACAGGCACCCTGAGCT
TGAAATCAAGTCTGTGATGGCTTCCAAGGCCGAGAGAAGGAGGCCGTGATCTGCTTCCGTGATCCAACAG
GAAAGGTGAAGTTGGTTTTCTTGTGAGGACCGGAGGATCAACGTGGCTGTCACCCGTGCCCGACGCCACGTGGC
GGTCATCTGTGACTCCCGTACTGTCAACAACCATGCATTTTTGAAGACCCTGGTGGAGTATTTACACAGCATGG
GGAAGTACGCACGGCCTTTGAGTATCTTGACGATATTGTCCCAGAAAACCTATTCCTATGAGAACTCCCAGGGTTC
CAGCCACGCTGCCACCAAGCCCCAGGGACCTGCTACGTCCACCAGGACCGGAAGCCAGCGGCAGGAGGGAGGCCA
GGAGGCTGCAGACCTGCCAGACAGGGCCGGAAGAAGCCGGCTGGGAAGTCTTGGCCTCTGAAGCTCCATCTCA
GCCCAGCCTCAACGGAGGCAGCCAGAGGGAGTGGAGAGCCAAGATGGCGTGGACCACTTCCGGGCCATGATAGT
GGAGTTTATGGCCAGCAAGAAGATGCAGTTGGAGTTTCTCTCTTCCCTCAATTCCCACGACAGGCTGCGGGTCCA
CCAAATAGCCGAGGAGCAGGGCTGAGGCACGACAGTTCCGGGGAAGGGAAGAGGAGTTTCACTGTGAGCAA
GAGGGCCCCGCGACCCCGAGCAGCCCTGGGACCCCCAGCAGGGACCGGTGGCCAGCCCCCTCTCCAGCCAGTGCC
CCCTACCCCTGCGCAGACAGAGCAGCCTCCCAGGGAGCAGCGTGGCCAGACCAGCCTGATCTGAGGACGCTGCA
CCTGGAGAGACTGCAGAGGGTCAGGAGCGCGCAGGGGCAGCCCGCCAGCAAGGAGCAGCAGGCCTCAGGGCAGCA
GAAACTTCCAGAAAAGAAAAAGAAAAAGCCAAAGGACATCCGGCCACAGATCTGCCACGGAGGAGGACTTTGA
GGCCCTGGTTTCTGCGCGCGTTAAGGCTGATAACACCTGCGGCTTTGCCAAGTGACAGCCGGCGTCAACCCCT
GGGCCAGTTCTGCCAGCTCTGCAGCCGCGCTACTGCCTCAGCCACCACCTGCCCAGATCCATGGCTGCGGTGA
GAGGGCTCGCGCCCATGCCGGCAGAGAATCAGCCGGGAAGGGGTCTCTATGCCGGCAGCGGGACCAAGAACGG
ATCCCTGGACCCAGCCAAGAGGGGCCAGCTGCAGAGGAGGCTGGATAAGAAGCTGAGTGAGCTCAGCAACCAGAG
GACCAGCCGGAGGAAGGAGAGGGGGACGTGACCGGCCGCATCCTTGACGCCCCGCGGAGCTCTCTCCATGGTAG
CCCAGGGCGCTGGCAGACCATGCTCCGCCTCCACCAGGGCCACAGAGGAGCGGAGGGGCTATGGGGGAGGAGCG
GAGGGCCCTGTTGGGGAAGGTTGGTTTTTGGACCCAGGGATAAGCTTTTCCGATGTCACAATGTGGAGGAAAG
CACCTGGGGGACAACAGTGCTCGTGCAGGTGGGGCTTGGGAAATGCACGTCCCTTCCCTTACTCCCCGCCAAAC
CCACATCCCAGCCTCTGGATCCTGGGGAAGTTCCAGTCC

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FIGURE 3311A

CACACGGACTACAGGGGAGTTTTGTTGAAGTTGCAAAGTCTGGAGCCTCCAGAGGGCTGTCGGCGCAGTAGCAG
CGAGCAGCAGAGTCCGCACGCTCCGGCGAGGGGAGAGAGCGCGAGGGAGCGCGGGGCGAGCAGAAGCGAGAGCC
GAGCGCGGACCCAGCCAGGACCCACAGCCCTCCCCAGCTGCCAGGAAGAGCCCCAGCCATGGAACACCAGCTCC
TGTGCTGCGAAGTGGAACCATCCGCCGCGCTACCCCGATGCCAACCTCCTCAACGACCGGGTGCTGCGGGCCA
TGCTGAAGGCGGAGGAGACCTGCGCGCCCTCGGTGTCCTACTTCAAATGTGTGAGAAGGAGGTCTGCGGCTCA
TGCGGAAGATCGTCGCCACCTGGATGCTGGAGGTCTGCGAGGAACAGAAGTGCAGGAGGAGGTCTTCCCGCTGG
CCATGAACCTACCTGGACCGCTTCTGTGCTGGAGCCCGTGAAAAAGAGCCGCTGCAGCTGCTGGGGGCCACTT
GCATGTTCTGTGGCTCTAAGATGAAGGAGACCATCCCCCTGACGGCCGAGAAGCTGTGCATCTACACCGACAACCT
CCATCCGGCCCGAGGAGCTGCTGCAAATGGAGCTGCTCCTGGTGAACAAGCTCAAGTGGAACCTGGCCGCAATGA
CCCCGCACGATTTTCAATTGAACACTTCTCTCCAAAATGCCAGAGGCGGAGGAGAACAAACAGATCATCCGCAAC
ACGCGCAGACCTTCGTTGCCCTCTGTGCCACAGATGTGAAGTTCATTTCCAATCCGCCCTCCATGGTGGCAGCGG
GGAGCGTGGTGGCCGAGTGCAAGGCCTGAACCTGAGGAGCCCAACAACCTCCTGTCTACTACCGCTCACAC
GCTTCTCTCCAGAGTGATCAAGTGTGACCCAGACTGCCTCCGGGCTGCCAGGAGCAGATCGAAGCCCTGCTGG
AGTCAAGCCTGCGCCAGGCCCAGCAGAACATGGACCCCAAGGCCGCCGAGGAGGAGGAGGAGGAGGAGGAGG
TGGACCTGGCTTGCACACCCACCGACGTGCGGGACGTGGACATCTGAGGGCGCCAGGCAGGCGGGCGCCACCGCC
ACCCGCAGCGAGGGCGGAGCCGGCCCCAGGTGCTCCCTGACAGTCCCTCCTCTCCGGAGCATTTTGATACCAGA
AGGGAAAGCTTCATTCTCCTTGTGTTGTTGTTTTTCCCTTGTCTTTCCCCCTTCCATCTCTGACTTAAGCA
AAAGAAAAAGATTACCCAAAACTGTCTTTAAAGAGAGAGAGAGAAAAAATAGTATTTGCATAACCCCTGA
GCGGTGGGGGAGGAGGGTTGTGCTACAGATGATAGAGGATTTTATACCCCAATAATCAACTCGTTTTTATATTAA
TGTACTTGTCTCTGTGTTGAAGAATAGGCATTAACACAAAGGAGGCGTCTCGGGAGAGGATTAGGTTCCATCCT
TTACGTGTTTTAAAAAAGCATAAAAAACATTTTAAAAACATAGAAAAATTCAGCAAAACCATTTTTAAAGTAGAAG
AGGGTTTTAGGTAGAAAAACATATTCTTGTGCTTTTCTGATAAAGCACAGCTGTAGTGGGTTCTAGGCATCTC
TGTACTTTGCTTGTCTCATATGATGTAGTCACTTTATAAGTCATTGTATGTTATTATATTCCGTAGGTAGATGTG
TAACCTCTTCACCTTATTTCATGGCTGAAGTCACCTCTTGGTTACAGTAGCGTAGCGTGGCCGTGTGCATGTCCTT
TGCGCTGTGACCACCACCCCAACAACCATCCAGTGACAAACCATCCAGTGGAGGTTTGTGCGGCACCAGCCAG
CGTAGCAGGGTGGGAAAGGCCACCTGTCCCACTCCTACGATACGCTACTATAAAGAGAAGACGAAATAGTGACA
TAATATATTCTATTTTTTATACCTCTTCTATTTTTGTAGTGACCTGTTTATGAGATGCTGGTTTTCTACCCAACGG
CCCTGCAGCCAGCTCACGTCCAGGTTCAACCCACAGCTACTTGGTTTGTGTTCTTCTCATATTCTAAAACCAT
CCATTTCCAAGCACTTTTCACTCAATAGGTGTAGGAAATAGCGCTGTTTTTGTGTTGTGTGAGGGAGGGCAGTT
TTCTAATGGAATGGTTTGGGAATATCCATGTACTTGTGTTGCAAGCAGGACTTTGAGGCAAGTGTGGGCCACTGTG
GTGGCAGTGGAGGTGGGGTGTGTTGGGAGGCTGCGTGCCAGTCAAGAAGAAAAAGGTTGCATTCTCACATTGCCA
GGATGATAAGTTCCTTTCTTTTCTTTAAAGAAGTTGAAGTTTAGGAATCCTTTGGTGCCAACCTGGTGTGTTGAAA
GTAGGGACCTCAGAGGTTTACCTAGAGAACAGGTGGTTTTTAAGGGTTATCTTAGATGTTTCACACCGGAAGGTT
TTTAAACACTAAAAATATATAATTTATAGTTAAGGCTAAAAAGTATATTTATTGCAGAGGATGTTTATAAGGCCAG
TATGATTTATAAATGCAATCTCCCCTTGATTTAAACACACAGATACACACACACACACACACACACAAACC
TCTGCTTTTGATGTTACAGATTTAATACAGTTTATTTTTAAAGATAGATCCTTTTATAGGTGAGAAAAAACA
TCTGGAAGAAAAAACCACACAAAGACATTGATTCAGCCTGTTTGGCGTTTCCAGAGTCATCTGATTGGACAGG
CATGGGTGCAAGGAAATTAGGGTACTCAACCTAAGTTTCGGTTCCGATGAATTCCTATCCCCTGCCCTTCTTT
AAAAAATTAGTGACAAAATAGACAATTTGCACATCTTGCTATGTAAATCTTGTAATTTTTATTAGGAAGTGT
TGAAGGGAGGTGGCAAGAGTGTGGAGGTGACGTGTGAGGGAGGACAGGCGGAGGAGGTGTGAGGAGGAGGCTC
CCGAGGGGAAGGGGCGGTGCCACACCGGGGACAGGCCGAGCTCCATTTCTTATTGCGCTGCTACCGTTGACT
TCCAGGCACGGTTTGGAAATATTACATCGCTTCTGTATCTTTTACATTTGTTTGTGCTGCTATTGGAGGATCA
GTTTTTTGTTTTACAATGTATATACGCCATGTACTGATTTTATGTTTTCTCTTAGAACATTGTATTACAGATGC
CTTTTTTGTAGTTTTTTTTTTTTTTTATGTGATCAATTTGACTTAATGTGATTACTGCTCTATTCCAAAAAGGTT
GCTGTTTACAAATACCTCATGCTTCACTTAGCCATGGTGGACCCAGCGGGCAGGTTCTGCGCTGCTTTGGCGGGCA
GACACGCGGGCGGATCCACACAGGCTGGCGGGGGCCGGCCCCGAGGCCGCGTGCGTGAGAACCAGCGCCGGTGT
CCCCAGAGACCAGGCTGTGTCCCTCTTCTCTTCCCTGCGCCTGTGATGCTGGGCACCTTCATCTGATCGGGGGCGT
AGCATCATAGTAGTTTTTACAGCTGTGTTATCTTTGCGTGTAGCTATGGAAGTTGCATAATTATTATTATTATT

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FIGURE 3311B

ATTATAACAAGTGTGTCTTACGTGCCACCACGGCGTTGTACCTGTAGGACTCTCATTCTGGGATGATTGGAATAGC
TTCTGGAATTTGTTCAAGTTTGGGTATGTTTAATCTGTTATGTACTAGTGTTCTGTTTGTATTGTTTGTAA
TTACACCATAATGCTAATTTAAAGAGACTCCAAATCTCAATGAAGCCAGCTCACAGTGCTGTGTGCCCCGGTCAC
CTAGCAAGCTGCCGAACCAAAAGAATTTGCACCCCGCTGCGGGCCCCACGTGGTTGGGGCCCTGCCCTGGCAGGGT
CATCCTGTGCTCGGAGGCCATCTCGGGCACAGGCCACCCCGCCCCACCCCTCCAGAACACGGCTCACGCTTACC
TCAACCATCCTGGCTGCGGCGTCTGTCTGAACCACGCGGGGGCCTTGAGGGACGCTTGTCTGTGCGTGATGGGGC
AAGGGCACAAGTCTTGATGTTGTGTGTATCGAGAGGCCAAAGGCTGGTGGCAAGTGCACGGGGCACAGCGGAGT
CTGTCTGTGACGCGCAAGTCTGAGGGTCTGGGCGGCGGGCGGCTGGGTCTGTGCATTTCTGGTTGCACCGCGGC
GCTTCCCAGCACCAACATGTAACCGGCATGTTTCAGCAGAAGACAAAAGACAAACATGAAAGTCTAGAAATAA
AACTGGTAAAACCCCAAAAAAAAAAAAAAAAAA

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FIGURE 3312

MEHQLLCCEVETIRRAYPDANLLNDRVLRAMLKAEETCAPSVSYFKCVQKEVLPSMRKIVATWMLEVCEEQKCEE
EVFPLAMNYLDRFLSLEPVKKSRLQLLGATCMFVASKMKETIPLTAEKLCIYTDNSIRPEELLQMELLLVNKLKW
NLAAMTPHDFIEHFLSKMPEAEENKQIRKHAQTFVALCATDVKFISNPPSMVAAGSVVAQGLNLRSPNNFLS
YYRLTRFLSRVIKCDPDCLRACQEQIEALLESSLRQAQQNMDPKAAEEEEEEEEVLDLACTPTDVRDVDI

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FIGURE 3313

CTCTAAAGGTTTCGGGGGTGGAATCCTTGGGCCGCTGGGCAAGCGGCGAGACCTGGCCAGGGCCAGCGAGCCGAGG
ACAGAGGGCGCACGGAGGGCCGGGCCGAGCCCCGGCCGCTTGCAGACCCCGCCATCGACCCGTTTCCTGGTGCTG
CTGCACTCGGTGTCGTCCAGCCTGTCGAGCAGCGAGCTGACCGAGCTCAAGTTCCTATGCCTCGGGCGCGTGGGC
AAGCGCAAGCTGGAGCGCGTGCAGAGCGGCCTAGACCTCTTCTCCATGCTGCTGGAGCAGAACGACCTGGAGCCC
GGGCACACCGAGCTCCTGCGCGAGCTGCTCGCCTCCCTGCGGCGCCACGACCTGCTGCGGCGCGTGCACGACTTC
GAGGCGGGGGCGGCGGCCGGGGCCGCGCCTGGGGAAGAAGACCTGTGTGCAGCATTTAACGTCATATGTGATAAT
GTGGGGAAAGATTGGAGAAGGCTGGCTCGTCAGCTCAAAGTCTCAGACACCAAGATCGACAGCATCGAGGACAGA
TACCCCGCAACCTGACAGAGCGTGTGCGGGAGTCACTGAGAATCTGGAAGAACACAGAGAAGGAGAACGCAACA
GTGGCCACCTGGTGGGGGCTCTCAGGTCTGCCAGATGAACCTGGTGGCTGACCTGGTACAAGAGGTTTCAGCAG
GCCCCGTGACCTCCAGAACAGGAGTGGGGCCATGTCCCCGATGTATGGAACCTCAGACGCATCTACCTCCGAAGCG
TCCTGATGGGCCGCTGCTTTGCGCTGGTGGACCACAGGCATCTACACAGCCTGGACTTTGGTTCTCTCCAGGAAG
GTAGCCCAGCACTGTGAAGACCCAGCAGGAAGCCAGGCTGAGTGAGCCACAGACCACCTGCTTCTGAACCTCAAGC
TGCGTTTATTAATGCCCTCTCCCGCACCAGGCCGGGCTTGGGCCCTGCACAGATATTTCCATTTCTTCCTCACTAT
GACACTGAGCAAGATCTTGTCTCCACTAAATGAGCTCCTGCGGGAGTAGTTGGAAAGTTGGAACCGTGTCAGCA
CAGAAGGAATCTGTGCAGATGAGCAGTCACACTGTTACTCCACAGCGGAGGAGACCAGCTCAGAGGCCCAGGAAT
CGGAGCGAAGCAGAGAGGTGGAGAACTGGGATTTGAACCCCGCCATCCTTCACCAGAGCCCATGCTCAACCACT
GTGGCGTTCTGCTGCCCCTGCAATTGGCAGAAAGGATGTTTTGTCCATTTCTTGGAGGCCACCGGGACAGACC
TGGACACTAGGGTCAGGCGGGGTGCTGTGGTGGGGAGAGGCATGGCTGGGGTGGGGGTGGGGAGACCTGGTTGGC
CGTGGTCCAGCTCTTGGCCCTGTGTGAGTTGAGTCTCCTCTCTGAGACTGCTAAGTAGGGGCAGTGATGGTTGC
CAGGACGAATTGAGATAATATCTGTGAGGTGCTGATGAGTGATTGACACACAGCACTCTCTAAATCTTCCTTGTG
AGGATTATGGGTCTGCAATCTACAGTTTCTTACTGTTTTGTATCAAAATCACTATCTTTCTGATAACAGAATT
GCCAAGGCAGCGGGATCTCGTATCTTTAAAAAGCAGTCCTCTTATTCCTAAGGTAATCCTATTTAAA

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FIGURE 3314

MDPFLVLLHSVSSSLSSSELTELKFLCLGRVGKRLKLERVQSGLDLFSMLLEQNDLEPGHTELLRELLASLRRHDL
LRRVDDFEAGAAAGAAPGEEDLCAAFNVICDNVGKDWRRRLARQLKVSDTKIDSIEDRYPRNLTERVRESLRIWKN
TEKENATVAHLVGALRSCQMNLVADLVQEVQQARDLQNRSGAMSPMSWNSDASTSEAS

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FIGURE 3315

GAAGCCAGGCTGAGTGAGCCACAGACCACCTGCTTCTGAACTCAAGCTGCGTTTATTAATGCCTCTCCCGCACCA
GGCCGGGCTTGGGCCCTGCACAGATATTTCCATTTCTTCTCACTATGACACTGAGCAAGATCTTGTCTCCACTA
AATGAGCTCCTGCGGGAGTAGTTGGAAAGTTGGAACCGTGTCAGCACAGAAGGAATCTGTGCAGATGAGCAGTC
ACACTGTTACTCCACAGCGGAGGAGACCAGCTCAGAGGCCAGGAATCGGAGCGAAGCAGAGAGGTGGAGAACTG
GGATTTGAACCCCCGCCATCCTTCACCAGAGCCCATGCTCAACCACTGTGGCGTTCTGCTGCCCCCTGCAGTTGGC
AGAAAGGATGTTTTGTCCCATTTCTTGGTCCAGCTCTTGGCCCCCTGTGTGAGTTGAGTCTCCTCTCTGAGACTG
CTAAGTAGGGGCAGTGATGGTTGCCAGGACGAATTGAGATAATATCTGTGAGGTGCTGATGAGTGATTGACACAC
AGCACTCTCTAAATCTTCCTTGTGAGGATTATGGGTCTGCAATTCTACAGTTTCTTACTGTTTTGTATCAAAT
CACTATCTTCTGATAACAGAATTGCCAAGGCAGCGGGATCTCGTATCTTTAAAAGCAGTCCTCTTATTCCTAA
GGTAATCCTATTAAACACAGCTTTACAACCTCCATACTAC

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FIGURE 3316A

GAATTCCGGGCCCCCGGCCGTCCCTCTTAAGGCTCTTCCTCCGCTCCGCCAGTGTCCGGCCGCGGGCCGGCCTTA
GTGACTGGGGCGGGCGGGCCCCGGGGCCGCGGCGTGGGGCGGGCAGGCGGACGCCGGCCGCGGGCTGCTTTCGTGC
GCTCCCAAGCTCTCCCGAGCGAGCAGCCGCCCGGAGCCGCCGCGGAGCCTCCTCGCCCCGTCCCGCCGGCGAG
CAAGATGATGTGCGAGGTGATGCCGACCATCAGCGAAGCAGAAGGCCCCCTGGAGGAGGTGGAGGCCATGGTTC
CGGCTCCCCTTACAGCCAGATGCAGATTACATTTTGAACAGTTGATGGTCTCCATGCTAGAAGAAAGGGACCG
CCTTCTTGATACTGAGAGAGACTCAAGAAACGCTGGCCTTAACCCAGGGGAAGTTACACGAGGTGGTTCATGA
AAGAGATTCTTGCAGAGACAGCTCAACACGGCACTTCCACAGGAGTTCGCAGCACTTACTAAAGAACTCAATGT
ATGCAGGGAACAGCTCCTTGAAAGGGAAGAAGAAATTGCTGAACTGAAAGCAGAAAGGAATAACACCAGGCTGCT
GTTAGAGCATTGGAATGCCTTGCTCTCCAGGCATGAGCGGTCTCTTAGGATGACCGTGGTGAAGAGACAAGCGCA
GTCTCCAGCAGGCGTGTCCAGCGAAGTGAAGTGTGTAAGCACTGAAGTCCTTATTTGAACACCACAAAGCTCT
GGATGAAAAGGTGAGAGAGCGATTACGAGTAGCACTTGAAGATGTAGTTTGTTAGAAGAGGAATTAGGTGCCAC
ACACAAAGAGCTAATGATTCTTAAAGAACAGAATAATCAGAAAAAACTCTAACAGATGGAGTGTGGACATAAA
CCATGAACAAGAAAATACACCAAGCAGAGTGGAAAGAGATCTTCTGATGGTCTTTAAGCCACGAGGAAGACCT
TGCTAAAGTAATTGAGCTCCAAGAAATCATAAGTAAGCAGTCAAGGGAACAGAGCCAAATGAAAGAACGCCCTGGC
TTCCCTTTCCAGTCATGTGACAGAAGTGAAGAGGATCTGGACACGGCTAGAAAAGATCTCATCAAATCTGAAGA
AATGAACACAAAATTGCAACGAGATGTCCGTGAAGCCATGGCCCAAAGGAAGATATGGAAGAGAGAATCACTAC
TCTTGAAAAACGCTACCTCGCTGCACAGCGTGAAGCCACATCTGTGCATGACCTCAATGATAAACTTGAAAAATGA
AATTGCAAATAAAGATTCTATGCATCGACAGACTGAAGATAAAAACCGCCAGTTACAGGAGCGCTTGAATTTGGC
AGAGCAAAGCTGCAACAGACACTGAGGAAGGCAGAGACGCTCCCGGAGGTGGAGGCGGAGCTGGCCACAGAGGT
GGCAGCGCTTTCCAAGGCTGAAGAGAGACACGGCAACATTGAAGAAAGGTTACGACAGATGGAAGCACAGTTGGA
GGAGAAGAATCAAGAACTGCAGCGGGCAAGGCAAAGAGAAAAAATGAACGAAGAACATAATAAACGTTTATCAGA
CACTGTTGACAAGCTGCTTTTCAGAATCTAATGAGAGGCTTCAACTTCATCTTAAAGAGAGAATGGCTGCTTTGGA
AGATAAGAACTCTCTTTTAAAGAGAAGTTGAAAGTGCAAAAAAGCAGTTAGAAGAAACACAACACGATAAGGATCA
GCTTGCTCTAAACATTGAAGCACTGAGGGCTGAACTAGACCACATGAGACTAAGAGGTGCTTCACCTTCATCATGG
CCGACCCCACTTGGGCAGTGTCCCAGATTTTCAGGTTCCCATGGCAGACGGCCACACAGACTCCTACAGCACCAG
TGCAGTGTGCGGCGCCACAGAAAGGCCGGCTGGCAGCCCTGCGAGATGAGCCTTCCAAGGTACAACTCTTAA
TGAGCAGGATTGGGAACGTGCCAGCAAGCTAGTGTCTTGGCAAATGTAGCACAAGCATTTCGAGAGTGATGCTGA
CGTGTCTGATGGTGAAGATGACAGGGACACTCTCCTCAGCTCAGTTGACCTGCTATCGCCAGCGGGCAGGCCGA
CGCGCACACACTAGCCATGATGCTTCAAGGAGCAGCTGGACGCCATCAACAAAGAGATCAGGTTGATTACAGGAAGA
AAAAGAAAATACAGAGCAGCGGGCAGAGGAGATTGAAAGTCGAGTTGGCAGTGGAAGTCTAGACAATCTTGGTCG
TTTTAGATCAATGAGCTCCATTCCCCCTACCTTGCTTCTCTCGCTTGCTAGCTCCTCCCCCTCCGGGCAGTGGGCG
CTCCACCCACGAAGGATCCCTCAGAGCCAGCTCGGGAAGTGGACAGACTGGGCGTCATGACCTTTTGCCACC
TTCCAGAGAAGAGGTACGAGATGACAAGACAACCATAAAGTGTGAAACCTCCCCGCCTTCTCCCCGAGAGCCCT
TCGGTTAGACCGGCTGCACAAAGGGGCGCTGCACACCGTCAGCCACGAGGACATCAGGGACATAAGGAACTCCAC
AGGCTCCCAGGATGGTCCCGTGAGCAACCCAGCAGTAGCAACAGTAGCCAGGACTCGCTCCACAAAGCCCCAAA
GAAGAAAGGCATTAAAGTCTCCATTGGCCGCTTGTGTTGGCAAAGAAAGAAAGGGCCGACCTGGACAACTGGCAA
AGAAGCATTAGGACAAGCTGGTGTTCGAGACGGATAACTCATCTCAGGATGCCTTGGGACTTAGCAAATTGGG
GGGACAGGCTGAAAAAATCGTAAACTTCAAAAAAGCATGAATTGCTGGAGGAAGCCCGGAGACAAGGTTTACC
TTTTGCCAATGGGACGGGCCAACGGTTGTGGTCTGGCTAGAGCTCTGGGTTGGATGCCAGCCTGGTATGTGGC
TGCCTGCCGAGCAAACGTGAAAAGCGGGGCCATCATGTCCGCCCTGTCCGACACAGAGATCCAGCGTGAGATTGG
CATCAGCAACCCCTGCACAGGCTGAAGCTGAGGCTGGCCATCCAGGAGATCATGTGCTGACCAGCCCGTCTGC
CCCGCCACATCTAGAACGACACTCGCTATGGGGACATGAACCACGAGTGGATCGGCAACGAGTGGCTCCCCAG
CCTGGGCTCCCCAGTACCGCAGCTACTTCATGGAGTGGCTTGTAGACGCCAGGATGCTGGACCACTTGACCAA
GAAAGACCTTCGAGGGCAGCTGAAAATGGTGCAGAGTTTTCACAGAAACAGTTTCCAGTGTGGAATTATGTGCCCT
GAGAAGGTTAAATTATGACCGGAAAGAACTGGAAAGAAAGAAAGAAAGTCAAGATGAAATAAAGACGCTGCT
TGTTTGGAGCAATGATCGAGTGATTGCTGGATCCTGTCAATTGGCCTTAAAGAAATATGCAACAATCTTATAGA
GAGTGGTGTTCACGGAGCACTTCTGGCCTTAGATGAAACCTTCGACTTCAGTGCCTGGCACTGCTGTTACAGAT
CCCGACGCAGAACACACAGGCTCGTGCTGTCTTGGAAAGAGAATTTAACACCTTTTGGTCATGGGGACTGATAG

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FIGURE 3316B

AAGGTTTGGATGAAGATGATGATAAAAGCTTTAGGAGAGCACCTTCATGGAGAAAAAGTTTAGACCAAAGGACAT
TCGTGGCTTAGCTGCTGGGTCAGCAGAGACTCTCCCTGCAAACCTCCGGGTGACTTCTTCTATGCTTCCCCCTC
TATGCAGCCAAAGAAGATGCAGATGGACGGCAATGTATCAGGAACACAGAGGTTGGATTCTGCTACAGTCAGGAC
TTACTCCTGCTAAAGTCTCCTGTTGTTTACCCACACTACTTCTACAGATGATTATGCAGCATTGAATCCAACAA
AGACTACATTTTGGAAACCAGTGAATCTTTAATCTTGTTAATACTTGTTATATGGACCCTAAGATATTTATTAC
AGAGTTTTTAATTAGTGAAAAATTCATGAATACCATAGAGAAAATATTTTAGAATTTAATGTTTCTTATATTTAT
GTAAACTTATGACTCTTCATTTATATAGTTACTTACTTTTTTCATGTATATCCAGGCTATAAAATATCCTTTCAAAT
CATGTTCTTATACCTAATTTTAGTCTTTCAAATGAATGTACTGTAATGCTTGTATGTATAAATCCTATGAATAGA
GGGCTTTTGTAATTATGCATTTATTGTAATTATCATTATTTTTTAATGATAAACCATGACAAAGGATTTTACG
TTTATAAAATTATGACAGAAGCCATGTGCCCCGAATTC

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FIGURE 3317

MMCEVMPTTISEAEGPPGGGGHSGSPSQPDADSHFEQLMVSMLEERDRLDRTLRETQETLALTQGKLHEVGHER
DSLQRQLNTALPQEFAAALTKELNVCREQLLEREEIEAELKAERNNTRLLEHLECLVSRHERSLRMTVVKRQAQS
PAGVSSEVEVLKALKSLFEHHKALDEKVRERLRVALERCSSLLEEELGATHKELMILKEQNNQKKTLDGVLDINH
EQENTPSTSGKRSSDGLSHEEDLAKVIELQEIISKQSREQSQMKERLASLSSHVTELEEDLDTARKDLIKSEEM
NTKLQRDVREAMAQKEDMEERITTTLEKRYLAAQREATSVDLNDKLENEIANKDSMHRQTEDKNRQLQERLELAE
QKLQOTLRKAETLPEVEAELAQRVAALSKAEERHGNIEERLRQMEAQLEEKNOELQRARQREKMNEEHNKRLSDT
VDKLLSESNERLQLHLKERMAALEDKNSLLREVESAKKQLEETQHDKDQLVLNIEALRAELDHMLRGASLHHGR
PHLGSVPDFRFPMDAGHTDSYSTSAVLRRPQKGRLAALRDEPSKVQTLNEQDWERAQQASVLANVAQAFESDADV
SDGEDDRDTLLSSVDLLSPSGQADAHTLAMMLQEQLDAINKEIRLIQEEKENTEQRAEEIESRVGSGSLDNLGRF
RSMSSIPPYPASSLASSSPPGSGRSTPRRIPHSPAREVDRLGVMTLLPPSREEVRDDKTTIKCETSPFSSPRALR
LDRLHKGALHTVSHEDIRDIRNSTGSQDGPVSNPSSSNSSQDSLHKAPKKKGIKSSIGRLFGKKEKGRPGQTGKE
ALGQAGVSETDNSSQDALGLSKLGGQAEKNRKLQKKHELLEEARQGLPFAQWDGPTVVVWLELWVGMPAWYVAA
CRANVKSGAIMSALSDTEIQREIGISNPLHRLKLRLAIQEIIMSLTSPSAPPTSRTTLAYGDMNHEWIGNEWLPSL
GLPQYRSYFMECLVDARMLDHLTKKDLRGQLKMGVDSFHRNSFQCGIMCLRRLNYDRKELEKREESQSEIKDVLV
WSNDRVIRWILSIGLKEYANNLIESGVHGALLALDETDFDLSALALLQIPTQNTQARAVLEREFNNLLVMGTDRL
FDEDDDKSFRRAPSWRKKFRPKDIRGLAAGSAETLPANFRVTSSMSSPSMQPKKMQMDGNVSGTQRLDSATVRTY
SC

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FIGURE 3318A

ACGAAGAGGTACGATTCCGGAGAATCGCGAGGCAGAGCGGGAGCGCGCAGCCAGGTGGAACTAATTCTAAGCCA
GACTGCTGGAGATCACCCTGTTCTAGTGTGTGGAGGCTTCCACCAGGAGGCGCATTGGAGTGACTGCTGGCATC
ACCAAGATGACACTCCACGCCACCCGGGGGGCTGCACTCCTCTCTTGGGTGAACAGTCTACACGTGGCTGACCCT
GTGGAGGCTGTGCTGCAGCTCCAGGACTGCAGCATCTTCATCAAGATCATTGACAGAATCCATGGCACTGAAGAG
GGACAGCAAATCTTGAAGCAGCCGGTGTGAGAGAGACTGGACTTTGTGTGCAGTTTTCTGCAGAAAATCGAAAAC
ATCCCTCTTCCCCAGAATGCCTGGTATCTGCACAGAAGGTGCTAGAGGGATCAGAGCTGGAAGTGGCGAAGATGA
CCATGCTGCTCTTATACCACTCTACCATGAGCTCCAAAAGTCCCAGGGACTGGGAACAGTTTGAATATAAAATTC
AGGCTGAGTTGGCTGTCAATTCTTAAATTTGTGCTGGACCATGAGGACGGGCTAAACCTTAATGAGGACCTAGAGA
ACTTCTACAGAAAGCTCCTGTGCCTTCTACCTGTTCTAGCACATTCCCTGAAGAGCTCTCCCCACCTAGCCACC
AGGCCAAGAGGGAGATTGCTTCTTAGAGCTACAGAAGGTTGCCTCCTCTTCCAGTGGGAACAACTTTCTCTCAG
GTTCTCCAGCTTCTCCCATGGGTGATATCCTGCAGACCCACAGTTCCAGATGAGACGGCTGAAGAAGCAGCTTG
CTGATGAGAGAAGTAATAGGGATGAGCTGGAGCTGGAGCTAGCTGAGAACCGCAAGCTCCTCACCAGAGAAGGATG
CACAGATAGCCATGATGCAGCAGCGCATTGACCGCTAGCCCTGCTGAATGAGAAGCAGGCGGCCAGCCCACTGG
AGCCCAAGGAGCTTGAGGAGCTGCGTGACAAGAATGAGAGCCTTACCATGCGGCTGCATGAAACCTGAAGCAGT
GCCAGGACCTGAAGACAGAGAAGAGCCAGATGGATCGCAAATCAACCAGCTTTCGGAGGAGAATGGAGACCTTT
CCTTTAAGCTGCGGGAGTTTGCCAGTCATCTGCAGCAGCTACAGGATGCCCTCAATGAGCTGACGGAGGAGCACA
GCAAGGCCACTCAGGAGTGGCTAGAGAAGCAGGCCAGCTGGAGAAGGAGCTCAGCGCAGCCCTGCAGGACAAGA
AATGCCCTGAAGAGAAGAACGAAATCCTTCAGGGAACCTTTACAGCTGGAAGAACACTTGTCCCAGCTGCAGG
ATAACCCACCCCAAGGAGAAGGGCGAGGTGCTGGGTGATGTCTTGAGCTGGAAACCTTGAAGCAAGAGGCAGCCA
CTCTTGCTGCAAAACAACACAGCTCCAAGCCAGGGTAGAGATGCTGGAGACTGAGCGAGGCCAGCAGGAAGCCA
AGCTGCTTGCTGAGCGGGGCCACTTCAAGAAGAAAAGCAGCAGCTGTCTAGCCTGATCACTGACCTGCAGAGCT
CCATCTCCAACCTCAGCCAGGCCAAGGAAGAGCTGGAGCAGGCCTCCCAGGCTCATGGGGCCCGTTGACTGCCC
AGGTGGCCTCTCTGACCTCTGAGCTCACCACACTCAATGCCACCATCCAGCAACAGGATCAAGAACTGGCTGGCC
TGAAGCAGCAGGCCAAAGAGAAGCAGGCCCAAGCTAGCACAGACCCTCCAACAGCAAGAACAGGCCTCCCAGGGCC
TCCGCCACCAGGTGGAGCAGCTAAGCAGTAGCCTGAAGCAGAAGGAGCAGCAGTTGAAGGAGGTAGCGGAGAAGC
AGGAGGCAACTAGGCAGGACCATGCCCAGCAACTGGCCACTGCTGCAGAGGAGCGAGAGGCCCTCCTTAAGGGAGC
GGGATGCGGCTCTCAAGCAGCTGGAGGCACTGGAGAAGGAGAAGGCTGCCAAGCTGGAGATTCTGCAGCAGCAAC
TTCAGGTGGCTAATGAAGCCCGGGACAGTGCCAGACCTCAGTGACACAGGCCCAGCGGGAGAAGGCAGAGCTGA
GCCGGAAGGTGGAGGAACTCCAGGCCTGTGTTGAGACAGCCCGCCAGGAACAGCATGAGGCCCAAGGCCAGGTTG
CAGAGCTAGAGTTGAGCTGCGGTCTGAGCAGCAAAAAGCAACTGAGAAAGAAAGGGTGGCCCAAGGAGAAGGACC
AGCTCCAGGAGCAGCTCCAGGCCCTCAAAGAGTCTTGAAGGTACCAAGGGCAGCCTTGAAGAGGAGAAGCGCA
GGGCTGCAGATGCCCTGGAAGAGCAGCAGCGTTGTATCTCTGAGCTGAAGGCAGAGACCCGAAGCCTGGTGGAGC
AGCATAAGCGGGAACGAAAGGAGCTGGAAGAAGAGAGGGCTGGGCGCAAGGGGCTGGAGGCTCGATTACAGCAGC
TTGGGGAGGCCCATCAGGCTGAGACTGAAGTCTTGGCGGGAGCTGGCAGAGGCCATGGCTGCCAGCACACAG
CTGAGAGTGAGTGTGAGCAGCTCGTCAAAGAAGTAGCTGCCTGGCGTGAGCGGTATGAGGATAGCCAGCAAGAGG
AGGCACAGTATGGCGCCATGTTCCAGGAACAGCTGATGACTTTGAAGGAGGAATGTGAGAAGGCCCGCCAGGAGC
TGCAGGAGGCAAAGGAGAAGGTGGCAGGCATAGAATCCACAGCGAGCTCCAGATAAGCCGGCAGCAGAACGAAC
TAGCTGAGCTCCATGCCAACCTGGCCAGAGCACTCCAGCAGGTCCAAGAGAAGGAAGTCAGGGCCCAAGGCTTG
CAGATGACCTCTCCACTCTGCAGGAAAAGATGGCTGCCACCAGCAAAGAGGTGGCCCGCTTGAGACCTTGGTGC
GCAAGGCAGGTGAGCAGCAGGAAACAGCCTCCCGGGAGTTAGTCAAGGAGCCTGCGAGGGCAGGAGACAGACAGC
CCGAGTGGCTGGAAGAGCAACAGGGACGCCAGTTCTGCAGCACACAGGCAGCGCTGCAGGCTATGGAGCGGGAGG
CAGAGCAGATGGGCAATGAGCTGGAACGGCTGCGGGCCGCGCTGATGGAGAGCCAGGGGCAGCAGCAGGAGGAGC
GTGGGCAGCAGAGAAAGGGAGGTGGCGGGCTGACCCAGGAGCGGGGCCGTGCCAGGCTGACCTTGCCCTGGAGA
AGGCGGCCAGAGCAGCTTGAGATGCGGCTGCAGAACGCCCTCAACGAGCAGCGTGTGGAGTTCGCTACCTTGC
AAGAGGCACTGGCTCATGCCCTGACGGAAAAGGAAGGCAAGGACAGGAGTTGGCCAAGCTTCGTGGTCTGGAGG
CAGCCCAAGATAAAAGAGCTGGAGGAACCTTCGGCAAACCTGAAGCAACTGAAGGAACAGCTGGCTAAGAAAGAAA
AGGAGCACGCATCTGGCTCAGGAGCCCAATCTGAGGCTGCTGGCAGGACAGAGCCAACAGGCCCAAGCTGGAGG
CACTGCGGGCAGAGGTGAGCAAGCTGGAACAGCAATGCCAGAAGCAGCAGGAGCAGGCTGACAGCCTGGAACGCA

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FIGURE 3318B

GCCTCGAGGCTGAGCGGGCCTCCCGGGCTGAGCGGGACAGTGCTCTGGAGACTCTGCAGGGCCAGTTAGAGGAGA
AGGCCCAGGAGCTAGGGCACAGTCAGAGTGCCCTAGCCTCGGCCCAACGGGAGTTGGCTGCCTTCCGCACCAAGG
TACAAGACCACAGCAAGGCTGAAGATGAGTGGAAGGCCAGGTGGCCCGGGGCGGCAAGAGGCTGAGAGGAAAA
ATAGCCTCATCAGCAGCTTGGAGGAGGAGGTGTCCATCCTGAATCGCCAGGTCTGGAGAAGGAGGGGGAGAGCA
AGGAGTTGAAGCGGCTGGTGATGGCCGAGTCAGAGAAGAGCCAGAAGCTGGAGGAGAGGCTGCGCCTGCTGCAGG
CAGAGACAGCCAGCAACAGTGCCAGAGCTGCAGAACGCAGCTCTGCTCTGCGGGAGGAGGTGCAGAGCCTCCGGG
AGGAGGCTGAGAAAACAGCGGGTGGCTTCAGAGAACCTGCGGCAGGAGCTGACCTCACAGGCTGAGCGTGCGGAGG
AGCTGGGCCAAGAATTGAAGGCGTGGCAGGAGAAGTTCTTCCAGAAAGAGCAGGCCCTCTCCACCCTGCAGCTCG
AGCACACCAGCACACAGGCCCTGGTGAGTGAGCTGCTGCCAGCTAAGCACCTCTGCCAGCAGCTGCAGGCCGAGC
AGGCCGCTGCCGAGAAACGCCACCGTGAGGAGCTGGAGCAGAGCAAGCAGGCCGCTGGGGGACTGCGGGCAGAGC
TGCTGCGGGCCAGCGGGAGCTTGGGGAGCTGATTCTCTGCGGCAGAAGGTGGCAGAGCAGGAGCGAACAGCTC
AGCAGCTGCGGGCAGAGAAGGCCAGCTATGCAGAGCAGCTGAGCATGCTGAAGAAGGCGCATGGCCTGCTGGCAG
AGGAGAACCGGGGGCTGGGTGAGCGGGCCAACCTTGCCCGCAGTTTCTGGAAGTGGAGTTGGACCAGGCCCGGG
AGAAGTATGTCCAAGAGTTGGCAGCCGTACGTGCTGATGCTGAGACCCGTCTGGCTGAGGTGCAGCGAGAAGCAC
AGAGCACTGCCCCGGAGCTGGAGGTGATGACTGCCAAGTATGAGGGTGCCAAGGTCAAGGTCTGGAGGAGAGGC
AGCGGTTCCAGGAAGAGAGGCAGAACTCACTGCCCAGGTGGAGCAGCTAGAGGTATTTAGAGAGAGCAAATA
AGCAGGTGGAAGAACTGAGTAAGAACTGGCTGACTCTGACCAAGCCAGCAAGGTGCAGCAGCAGAAGCTGAAGG
CTGTCCAGGCTCAGGGAGGCGAGAGCCAGCAGGAGGCCAGCGCCTCCAGGCCAGCTGAATGAAGTGAAGCCC
AGTTGAGCCAGAAGGAGCAGGCAGCTGAGCACTATAAGCTGCAGATGGAGAAAGCCAAAACACATTATGATGCCA
AGAAGCAGCAGAACCAAGAGCTGCAGGAGCAGCTGCGGAGCCTGGAGCAGCTGCAGAAGGAAAACAAAGAGCTGC
GAGCTGAAGCTGAACGGCTGGGCCATGAGCTACAGCAGGCTGGGCTGAAGACCAAGGAGGCTGAACAGACCTGCC
GCCACCTTACTGCCCAGGTGCGCAGCCTGGAGGCACAGGTTGCCCATGCAGACCAGCAGCTTCGAGACCTGGGCA
AATTCCAGGTGGCAACTGATGCTTTAAGAGCCGTGAGCCCCAGGCTAAGCCCCAGCTGGACTTGAGTATTGACA
GCCTGGATCTGAGCTGCGAGGAGGGGACCCCACTCAGTATCACCAGCAAGCTGCCTCGTACCCAGCCAGACGGCA
CCAGCGTCCCTGGAGAACCAGCCTCACCTATCTCCAGCGCCTGCCCCCAAGGTAGAATCCCTGGAGAGTCTCT
ACTTCACTCCCATCCCTGCTCGGAGTCAGGCCCCCTGGAGAGCAGCCTGGACTCCCTGGGAGACGTCTTCTTG
ACTCGGGTCGTAAGACCCGCTCCGCTCGTCGGCGCACCACGCAGATCATCAACATCACCATGACCAAGAAGCTAG
ATGTGGAAGAGCCAGACAGCGCCAACCTCATCGTTCTACAGCAGCGGCTCTGCTCCTGCTTCCCAGGCTAGCCTGC
GAGCCACCTCCTCTACTCAGTCTCTAGCTCGCCTGGGTTCTCCCGATTATGGCAACTCAGCCCTGCTCAGCTTGC
CTGGCTACCGCCCCACCACTCGCAGTTCTGCTCGTCTGCCAGGCCGGGTGTCCAGTGGGGCCCCCTCCAGGAA
GGAACAGCTTCTACATGGGCACTTGCCAGGATGAGCCTGAGCAGCTGGATGACTGGAACCGCATTGCAGAGCTGC
AGCAGCGCAATCGAGTGTGCCCCCACATCTGAAGACCTGCTATCCCTGGAGTCCAGGCCCTCCCTGAGCCTGG
GCACCATCACAGATGAGGAGATGAAAAGTGGAGACCCCCAAGAGACCCTGCGCCGAGCCAGCATGCAGCCAATCC
AGATAGCCGAGGGCACTGGCATCACCACCCGGCAGCAGCGCAAACGGGTCTCCCTAGAGCCCCACAGGGCCCTG
GAACTCCTGAGTCTAAGAAGGCCACAGCTGTTTCCACGCCCATGACTCCCGAGACCGACATGAAGGGCGCA
AACAGAGCACTACTGAGGCCAGAAAGCAGCTCCAGCTTCTACTAAACAGGCTGACCGGCGCCAGTCGATGG
CCTTCAGCATCTCAACACACCCAAGAAGCTAGGGAACAGCCTTCTGCGGCGGGGAGCCTCAAAGAAGGCCCTGT
CCAAGGCTTCCCCAACACTCGCAGTGGAACCCGCCGTCTCCGCGCATTGCCACCACACAGCCAGCGCCGCCA
CTGCTGCCGCCATTGGTGCCACCCCTCGAGCCAAGGGCAAGGCAAAGCACTAAAGGGCCAGTACCAGTGAGTGGC
CCCACCTGTGTCCCCGATGCTGACCTCACCTGGTCTCCGCTACTGTCCCTCTCAGTGCCCTCTCTCAGCTCCC
AGGCCAACAGTAGCCAAACCCCTAGAGACAGTGATGCTGCCCCGACCCCTGGCCTGGTCCCTGGTCTTCACTGG
CGCCTTCTCGGAGCTGGCCCAGGGGGCCTGGAGCATGGACAGTGTGGGCGCTCTCCCTACCTTGCCCTCCTTTT
CTTAAAGCAAAGTCACTTCTCCATCACAACCAGATTTGAGGCTGGTTTTGATGGCTGGGTCTTGGGCTGGCCA
GTCTTCTCTTAGCCTCTGGATCTAGAAGGGACCATAAGAGGAGTAGGCCCTGGTTCCTGCTGTCTGGTGGCTG
GGCCAGCAGGGGCCCTCACTCTTGAAGTCCAGGACTGGGTCTGACCTGGTGGGAGCACCTGCCAGAGGATGCTC
TTTCCCAGGACGGATGGGCCCTATGTCTCAGGAGTGGGGTTGGGGGACAGCCTTCAGCAGCAGCTCACACCCTAC
CTTCCCAGACTTGCACTGGGGTGGGATTTGGAGTGATGGGAAGGTTTTTAAGGGCCGGGATGGATCTTTCTA
AATGTTATTACTTGTAATAAAGTCTATTTTTCTCCCGT

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FIGURE 3319

MTMLLLYHSTMSSKSPRDWEQFEYKIQAEALAVILKFVLDHEDGLNLDNEDLENFLQKAPVPSTCSSTFPEELSPPS
HQAkreIRfLElQKVASSSSGNNFLSGSPASPMGDILQTPQFQMRRLKKQLADERSNRDELELELAENRKLlTEK
DAQIAMMQQRIDRLALLNEKQAASPLEPKLEELRDKNESLTMRlHETlKQCQDLKTEKSQMDRKINQLSEENGd
LSFKlREFASHLQQLQDALNELTEEHskATQEWLEKQAQLEKELSAALQDKKCLEEKNEILQGKLSQLEEHLSQL
QDNPPQEKGEVLGDVLQLETLKQEAATLAANNTQLQARVEMLETERGQQEAKLLAERGHFEEEkQQLSSlITDLQ
SSISNLSQAKEELEQASQAHGARlTAQVASLTSELTTLNATIQQQDQELAGLKQQAkEQQAQLAQTLQQQEQASQ
GLRHQVEQLSSSLKQKEQQLKEVAEKQEATRQDHAQQLATAAEEREASLRERDAALKQLEALEKEKAakLEILQQ
QLQVANEARDSAQTSVTQAQREKAELSRKVEELQACVETARQEQHEAQQAQVAEELQLRSEQQKATEKERVaqEK
DQLQEQQLQALKESlKVTKGSLEEEKRRAADALEEQRCISELKAETRSLVEQHkRERKELEERAGRKGLEARLQ
QLGEAHQAETEVLRRLEAEAMAAQHTAESECEQLVKEVAAWRERYEDSQEEAQYGAMFQEQlMTLKEECEKARQ
ELQEAKEKVAGIESHSELQISRQONELAEHLANLARALQQVQEKVRAQKLADDLSTLQEKMAATSKEVARLETL
VRKAGEQQETASRELvKEPARAGDRQPEWLEEQQGRQFCSTQAALQAMERAEQMGNELERLRAALMESQGGQQE
ERGQQEREVARLTQERGRAQADLALeKAARAELEMRLQNALNEQRVEFATLQeALAHALTEKEGKDQELAKLRGL
EAAQIKELEELRQTVKQLKEQLAKKEKEHASGSGAQSEAAGRTEPTGPKLEALRAEVSKLEQQCQKQEQEQADSLE
RSLEAERASRAERDSALETlQGQLEEKaQELGHSQSALASAQRELAaFRtkVQDHSKAEDeWKAQVARGRQEaER
KNSLISSLEEEVSIlnRQVLEKEGESKELKRLVMAESEKSQKLEERLRLlQAETASNSARAAERSsALREEVQSL
REEAEKQrVASENLRQELTSQAERAEELGQELKAWQEKFFQKEQALSTLQLEHTSTQALVSELlPAKHLCQQLQA
EQAAAEKRHREELEQSKQAAGGLRAELlRAQRELGELIPlRQKVAEQERTaQQLRAEKASyAEQLSMLKKAHGLL
AEENRGLGERANLGRQFLEVELDQAREKYVQELAAVRADAETRLAEVQREAQSTARELEVMTAKYEGAKVKVLEE
RQRFQEEERQKLTAQVEQLEVFQREQTKQVEELSkkLADSDQASKVQQQKLKAVQAQGGESQQEAQRLQAQLNELQ
AQLSQKEQAAEHYKLQMEKAKTHYDAKKQONQELQEQLRSLEQLQKENKELRAEAERLGHELQQAGLKtKEAEQT
CRHLTAQVRSLEAQVAHADQQLRDLGKFQVATDALKSREPQAKPQLDLSIDSLDLSCEEgTPlSITSKLPRTQPD
GTSVPGEpASPISQRLPPKVESLESlyFTPIPARSQAPLESSLDSLGDVFLDSGRKTRsARRRTTQIINIITMTKK
LDVEEPDSANSSFYSTRSAPASQASLRATSSSTQSLARLGSPDYGNSALLSLPGYRPtTRSSARRSQAQVSSGAPP
GRNSFYMGTCQDEPEQLDDWNRIAElQQRNrVCPPhLKTCYPLESRPSLSLGTITDEEMKTGDPQETLRRASMQP
IQIAEGTGITTRQQRKRVSlEPHQGPgtPESKKATSCFPRPMTPrDRHEGRKQSTTEAQKKAAPASTKQADRRQS
MAFSILNTPKKLGNSLLRRGASKKALSKASPNTRSgTRRSPrIATTTASaATAAAIGATPRAKGKAKH

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FIGURE 3320

GGGGGGGAGCGGGGAAAACAAAAGGAGACGAAGGACGCATGCGTTTGGTGAGTCCCGGATTCTGGTGGGTTCTTC
CGCTCAGGCTGGGTGAAGCGCTTCCGGGTCGCCGCCGGCAGCAGCCTCCCGGCGCGATGAAGACACTGAGGCTCA
GAGAGGTTAAGTGACTCAGCCAAGGTCAAACAGCTAGTAAGTGGTGGAGCCAGGACTCAAAGCCAGTCTAGGAGC
CATGTCCACTTTGTTCCCCTCACTCTTCCCTCGTGTGACTGAGACTCTGTGGTTTAATCTGGATCGACCCTGTGT
GGAAGAGACAGAGCTGCAGCAGCAGGAACAGCAGCATCAGGCCTGGCTCCAAAGCATCGCGGAGAAAGACAACAA
CCTGGTTTCTATTGGCAAGCCAGCCTCAGAGCACTATGATGACGAGGAAGAAGAGGATGATGAAGATGATGAGGA
TAGTGAAGAGGACTCAGAGGATGATGAGGATATGCAGGACATGGACGAGATGAATGACTACAATGAGTCACCGGA
TGATGGAGAGGTCAATGAGGTGGACATGGAAGGCAACGAACAGGATCAGGACCAGTGGATGATC**TAGG**TAGACAA
GGCAGGGTGGCCTCAGGGAGATTCCAGGCCAGCCAAACTACCCTGCATCCCAACCCCCAACCCCTGCCCACAGA
ACCAGCTGATGGCCCCAGTGCCTGAAAGTGCCCTTGGGCACCTCCTCAGCTGCTGCCAGGATCTGGTCTCTTTGG
CCCCCTCCAGGCCATCAGTCTGCACTTGAAATCCCAGGGCCTGAAACCTACTCCACCTTCCTGGCCAGTACCTC
ACCCCTTGATTGCCAGGTCTGGTCTAAGTTTCTTTAATAAAGACAAAGGAGTGATTTTCAAAAAAAAAAAAAAAAA
AA

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FIGURE 3321

MSTLFPSLFFPRVTETLWFLDRPCVEETELQQQEQQHQAWLQSLAEKDNNLVP I GKPASEHYDDEEEDEDED
SEEDSEDEDMDMDDEMNDYNESPDDGEVNEVDMEGNEQDQDQWMI

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FIGURE 3322A

CTGAGGCCGGCGCTGCAGGCAGCGGCGGCTGCGCGGTGAACGAGGCGGCCTGCGCGGCGGAGTGCTGAGTCCCGA
TCCCCGGCTCTGTCCGGCCACGGATCCTCAAGCCCGGGCCCCGGGCCCGGCCAGCCTCAGCCCTGAGCGTCT
CGGGGCGGATGGCGCGGGGCGGCGGGGCGGGCGGTGCTGAGCCCTGCGCGGGCCATGCGCCTCGGCCTGCGGGG
GCCGGGCCCCGGGGGCGCCCTGGGCAGCCAGGCCCTCTCTGGTACCACCGGACCTGAGCCGGGCGGCCGCGGA
GGAGCTGCTGGCCCGGGCGGGCCGCGATGGCAGCTTCTTGGTCCGAGACAGCGAGAGCGTGCGGGGGCCTTCGC
GCTCTGCGTCTGTATCAGAAGCATGTGCACACGTATCGCATTCTGCCTGATGGAGAAGATTCTTGGCTGTGCA
GACCTCGCAGGGTGTGCTGTGCGCCGCTTCCAGACCCTGGGTGAGCTCATCGGCCTGTACGCCAGCCCAACCA
GGGCCTTGTGTGCGCCCTGCTTCTTCTGTAGAGGTGAGCGAGAGCCGACCCACCGGATGACCGGGATGCCCTC
AGATGGGGAGGATGAGAAGCCCCCGCTGCCCCGCGCTCTGGCTCCACCAGCATTCTGCCCCACTGGGCCCAG
CAGTCCCCTGCCAGCTCCTGAGACTCCCACAGCTCCAGCTGCTGAGAGTGCTCCCAATGGGCTGAGACCGTCTC
GCACGACTACCTGAAAGGCAGCTATGGGCTGGACCTGGAAGCTGTGAGGGGTGGAGCCAGCCACCTGCCACCT
CACCCGTACCCTCGCTACCTCATGCCGGAGGCTGCACAGTGAGGTGGACAAGTCTGTGAGGCCTGGAGATCCT
GTCCAAGGTGTTTGACCAGCAGAGCTCGCCCATGGTGACCCGCTTTTGACGAGCAGACAACCTGCCACAGACAGG
GGAGCAGGAAGTAGAGAGCCTGGTGTGAAGCTGTGAGTGCTAAAGGACTTCTGTGAGGCATCCAGAAGAAGGC
CCTGAAGGCCCTACAGGACATGAGCTCCACAGCACCCCGAGCTCCGAGCCATCCACACGTAAGGCCAAGACCAT
CCCCGTGACGGCCTTTGAGGTGAAGCTAGATGTGACCCTGGGTGACCTGACCAAGATTGGGAAGTACAGAAGTT
CACGCTGAGCGTGGATGTGGAGGGTGGGCGGCTGGTGTGCTGCGGAGACAGCGGGACTCCCAGGAGGACTGGAC
CACCTTCACGCACGACCGCATCCGCCAGCTCATTAGTCCAGCGTGTCCAGAACAAGCTGGGTGTTGTGTTTGA
GAAGGAGAAGGACCGGACTCAGCGCAAGGACTTCATCTTTGTGAGTGCCCGGAAGCGGGAGGCCCTTCTGCCAGCT
GTTGCAGCTCATGAAGAACAAGCACTCCAAGCAGGACGAGCCGACATGATCTCAGTCTTCATAGGCACCTGGAA
CATGGGAAGTGTACCACCTCCAAAAACGTGACATCCTGGTTACATCGAAGGGTCTGGGGAAGACCTTGACGA
GGTCACAGTGACCATACCCCATGACATCTATGTCTTTGGGACCCAGGAGAACTCAGTGGGCGACCGCGAGTGGCT
GGACCTACTGCGCGGGGGCCTCAAGGAGCTTACGGATCTGGATTACCGCCCGATTGCCATGCAATCACTGTGGAA
TATCAAGGTGGCAGTGCTGGTCAAGCCAGAGCAGGAAACCGTATCAGCCATGTCAGTACGTCCAGTGTGAAGAC
TGGCATCGCCAACACCTTGGGGAACAAGGGGGCTGTGGGCGTCTCCTTCATGTTTAAATGGCACCTCATTGGCTT
TGTGAATTGTACCTCACCTCGGGAAATGAGAAGACGGCTCGGAGGAACCAAACTACTTGGACATCCTGCGGCT
GCTCTCGCTGGGCGACCGGCAGCTCAATGCCTTTGACATCTCTGCGTTTCACACACCTCTTCTGGTTTGGGGA
CCTCAACTACCGCTGGACATGGATATCCAGGAGATCCTGAACTACATCAGCAGGAAAGAGTTTGAAGCCCTCCT
CAGGGTGGACAGCTCAACCTGGAGCGGGGAGAAGCACAAGGTCTTCTTCGATTGAGTGGAGGAGATCTCCTT
CCCACCCACCTACCGCTATGAGCGGGGTTCGCGGACACATATGCCTGGCACAAGCAGAAGCCAACTGGGGTCCG
GACCAATGTGCCCTCATGGTGTGACCGGATTCTGTGGAAATCCTACCCTGAACTCACATCATCTGCAATTCTTA
TGGTTGCACTGATGACATCGTCACCAGCGACCATTCCTCGTGTGGGACATTTGAGGTGGAGTTACCTCCCA
GTTTATCTCCAAGAAAGGGCTCTCAAAGACTTCAGACCAGGCCTACATTGAGTTTGAAGAGCATCGAGGCCATTGT
GAAGACAGCCAGCCGACCAAGTCTTTCATCGAGTTCTACTCTACCTGCCTGGAGGAATACAAGAAGAGCTTTGA
GAATGATGCCCAGAGCAGTGACAACATCAACTTCCTCAAAGTGAGTGGTCTTCACGCCAGCTGCCACGCTCAA
ACCAATTCTGGCTGATATCGAGTACCTGCAGGACAGCACCTCCTGCTCACAGTCAAGTCCATGGATGGCTATGA
ATCCTATGGGGAGTGTGTGGTTGCACTCAAATCCATGATCGGCAGCACGGCCCAACAGTTCTGACCTTCCTATC
CCACCGTGGCGAGGAGACAGGCAATATCAGAGGCTCCATGAAGGTGCGGGTGGCCACGGAGCGCTGGGACCCG
TGAGCGGCTCTACGAGTGGATCAGCATTGATAAGGATGAGGCAGGAGCAAAGAGCAAAGCCCCCTCTGTGTCCCG
AGGGAGCCAGGAGCCCAGGTGAGGAGCCGCAAGCCAGCCTTACAGAGGCCTCCTGCCGCTCTCCAGGTTATT
TGAAGAACCAGAGAAACCGCCACCAACGGGGAGGCCCCAGCCCCACCCGAGCAGTCCCCGGGAGGAGCCCTT
GACCCCCAGGTTGAAGCCAGAGGGAGCTCCTGAACCAGAAGGGGTGGCGGCCCCCCCCACCCAAAGACAGCTTCAA
TAACCTTGCTACTACGTCTTGAAGGGGTCCGACACAGCTGCTGCCCGGAGCCACCTCGCTGCCCTGCCAGGCG
CCCTGTCCCATCTGCCACCAAGAACAAGTGGGACTTACAGTGCCTGCTCCACAGCTTGGGACCAACCGGACCC
TCGTGTGGGAGAGGGAGTTCTTTCAGATGAGGAGCTTGGAGGCACACTGCCCCCTCCAGACTTCCACCTCCACC
ACTGCCGAGCTAGCCATCTTCTGCCCCCAGCCTGGATCCTTTACCAGGGCCAGTGGTCCGGGGCGGTGGTGG
GGCTGAGGCCCGTGGCCACCACTCCCAAGGCCATCCAAGGCCTCCACTGCCCCCAGGCCCTCACCAGCCAG
CACTTTCTGGGGGAAGTGGCAGTGGGGATGACCGGTCTGCTCGGTGCTGCAGATGGCCAAGACGCTGAGCGA

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FIGURE 3322B

GGTGGACTATGCCCCTGCTGGGCCTGCACGCTCAGCGCTCCTCCCAGGCCCCCTGGAGCTGCAGCCCCCGGGG
ACTGCCCTCGGACTATGGCCGGCCCCCTCAGCTTCCCTCCACCCCGCATCCGGGAGAGCATCCAGGAAGACCTGGC
AGAGGAGGCTCCGTGCCTGCAGGGCGGGCGGGCCAGCGGGCTGGGCGAGGCAGGCATGAGTGCCTGGCTGCGGGC
CATCGGCTTGGAGCGCTATGAGGAGGGCCTGGTGCATAATGGCTGGGACGACCTGGAGTTTCTCAGTGACATCAC
CGAGGAGGACTTGGAGGAGGCTGGGGTGCAGGACCCGGCTCACAAGCGCCTCCTTCTGGACACCCTGCAGCTCAG
CAAGTGA TAGCGGAGGCACCACGAAGCTGTGAACTCAGAGCCCCCTCCCTGCTACCAAGGCCCAGCTATGGCCCCA
GGGTTGAAAAGTTATGAGGGTCAGGGCAGTATCTCTGCTTATTTATTGGGGTGCCTATTTATTGGGGATCTGC
ATTCCCGCTGCCCAATCATTTGCAATGCCCTAATTAGGGCATCCTGCCCTCGCCTTTTAGGCTCAGGACGGAA
GGTCAGTTGCCATGGTTACCGAGGACCCTGGTTACTCTGGTGTCTGCTGTTTTACTGGACCCCGCCTCCCAGCC
CCAGGGGTGCCTGTGGGGGTCCATTTGGGTACGTCTGGGCCCCCACTTTCACCAGTTTCTGCGGCCTTCCACCGG
GCCTGAACCACAGCGGAGGAGCTCCGCTAAGACCTCCCCACCCCGCTGGGGGTGGGGGCGGGTGTCCGTCCGGA
AATGAAGGAATAGCCCAGGACCGGGCTGGGGTTTATTTAACTGTTCTGTGTGGGTCTGGGGAGGGAGAGCACC
TTAATATTATTGGGGTTGGTTGGGGTGGGGCAGGATCTCAGCCATAAAGTGCCAGTTTGTCTAGTTCTCACTGTC
TCCTGGTCTGTGCTGCCCTGCTCTGGGGATGCACGGCGGCAGGGTGGGGGAGGGAGGTTCTCGCAGGTCTCAGC
CCGGGACAGGGTCTTGCAAGCAGCCTCCTGGGCAGTCGTAAGGGTTGCGGCGTGATGTCTTCAATAAATTAAGTT
TTATTTGGAAAA

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FIGURE 3323

MASACGAPGPGGALGSQAPSWYHRDLSRAAAEELLARAGRDGSFLVRDSESVAGAFALCVLYQKHVHTYRILPDG
EDFLAVQTSQGVVRRFQTLGELIGLYAQPNQGLVCALLPVEGEREPDPPDDRASDGEDEKPPLPPrSGSTSI
SAPTGPSSPLPAPETPTAPAAESAPNGLSTVSHDYLGKSYGLDLEAVRGGASHLPHLTRTLATSCRRLHSEVDKV
LSGLEILSKVFDQQSSPMVTRLLQQQNLQQTGEQELESVLKLSVLKDFLSGIQKKALKALQDMSSTAPPAPQPS
TRKAKTIPVQAFEVKLDVTLGDLTKIGKSQKFTLSVDVEGGRVLVLLRRQRDSQEDWTTFTHDIRIQLIKSQRVQN
KLGVVFEKEKDRTQRKDFIFVSARKREAFQQLQLMKNKHSKQDEPDMISVFIGTWNMGSVPPPKNVTSWFTSKG
LGKTLDEVTVTIPHDIYVFGTQENSVGDREWLDLLRGGLKELTDLDYRPIAMQSLWNIKVAVLVKPEHENRISHV
STSSVKTGIANTLGNKGAVGVSMFNGTSFGFVNCHLTSGNEKTARRNQNYLDILRLLSLGDRQLNAFDISLRF
HLFWFGDLNRYRLDMDIQEILNYISRKEFEPLLRVDQLNLEREKHKVFLRFSEEEISFPPTYRYERGSRDYAWHK
QKPTGVRTNVPSCDRILWKSYPETHIICNSYGCTDDIVTSDHSPVFGTFEVGVTSQFISKKGLSKTSDQAYIEF
ESIEAIVKTASRTKFFIEFYSTCLEEYKKSFENDAQSSDNINFLKVQWSSRQLPTLKPILADIEYLQDQHLLTV
KSMDGYESYGECVVALKSMIGSTAQQFLTFLSHRGEETGNIRGSMKVRVPTERLGTRERLYEWISIDKDEAGAKS
KAPSVSRGSQEPRSGSRKPAFTEASCPLSRLFEEPEKPPPTGRPPAPPRAAPREEPLTPRLKPEGAPEPEGVAAP
PPKNSFNPNPAYVLEGVPHQLLPPEPPSPARAPVPSATKNKVAITVPAPQLGHRHPRVGEGBSSDEESGGTLPP
PDFPPPLPDSAIFLPPSLDPLPGPVVRGRGGAEGPPPPKAHPRPPLPPGPSPASTFLGEVGSDDRSCSVLQ
MAKTLSEVDYAPAGPARSALLPGPLELQPPRGLPSDYGRPLSFPPPRIRESIQEDLAEAPCLQGGRASGLGEAG
MSAWLRAIGLERYEEGLVHNGWDDLEFLSDITEEDLEEAGVQDPAHKRLLLDTLQLSK

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FIGURE 3324

CTTGCGTTGCACCCGGGCTGAGTGCGGCCGCGACGGGGCGGGCGGACTCTCGGGCGCTCAGAGCTGGCCTCGGGT
CCTCGGAGCCTGGCGCTCGAACCTCCCTTCCGACCTCCACCCGGACCCCGACCCCGACCCGGCCTGGCCCCGGCC
CCGCCCCCGCCCCCGGGCCGATGGACTACTCCTACCTCAATTTCGTACGACTCGTGCGTGGCGGCCATGGAGGCG
TCCGCCTACGGCGACTTTTGGCGCTGCAGCCAGCCCGGGCGGCTTCCAATACAGCCCCCTGCGGCCCGCTTTCCCC
GCGGCAGGGCCGCCCTGCCCCGCGCTCGGCTCCTCCAAGTGCACACTTGGCGCCCTACGCGACCACCAGCCCGCG
CCCTACTCGGCAGTGCCCTACAAGTTCTTCCCAGAGCCATCCGGCCTGCACGAGAAGCGCAAGCAGCGGCGCATC
CGCACACGTTTACCAGCGCGCAGCTCAAGGAGCTGGAGCGCGTTTTTCGCTGAGACCCACTACCCCGACATTTAC
ACGCGTGAGGAGCTGGCGCTCAAGATCGACCTCACTGAGGCTCGCGTGCAGGTCTGGTTCCAGAACCGCCGGGCC
AAGTTCCGCAAAACAGGAGCGCGCGGCCAGCGCCAAGGGCGCGGCGGGCGCGGCGGGCGCCAAAAAGGGCGAGGCG
CGCTGCTCCTCCGAGGAÇGACGATTCCAAGGAGTCCACGTGCAGCCCCACGCCCGATAGCACCGCCTCGCTGCCG
CCGCCGCTGCGCCCGGCTGGCCAGCCCGCGCCTGAGCCCCAGCCCGCTGCCCGTGCACCTGGGCTCCGGGCCG
GGACCTGGGCCGGGGCCACAGCCGCTCAAGGGCGCACTGTGGGCCGGTGTGGCGGGCGGTGGGGGCGGCGGGCCT
GGCGCGGGAGCGGCCGAATACTTAAGGCTTGGCAGCCGGCGGAGTCCGGCCCCGGGCCCTTCTCCGGGGTTCTG
TCCTCCTTTACCGGAAGCCCGGCCCGCCCTGAAGACCAATCTCTTAG

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FIGURE 3325

GATAACAAGACCTCTGCCAGAAGAACCATGGCTTTGGAAGGCGGAGTTCAGGCTGAGGAGATGGGTGCGGTCCTC
AGTGAGCCCCCTGCCTCCCTGAACATAGGAAACCCACCTGGGCAGCCATGGGAATGGGACAATGGCACAGGCCAGGC
TCTGGGCTTGCCACCCACCACCTGTGTCTACCGCGAGAACTTCAAGCAACTGCTGCTGCCACCTGTGTATTGCGC
GGTGCTGGCGGCTGGCCTGCCGCTGAACATCTGTGTATTACCCAGATCTGCACGTCCCGCCGGGCCCTGACCCG
CACGGCCGTGTACACCCTAAACCTTGCTCTGGCTGACCTGCTATATGCCTGCTCCCTGCCCCCTGCTCATCTACAA
CTATGCCCAAGGTGATCACTGGCCCTTTGGCGACTTCGCCTGCCGCTGGTCCGCTTCCTCTTCTATGCCAACCT
GCACGGCAGCATCTCTTCTCACCTGCATCAGCTTCCAGCGCTACCTGGGCATCTGCCACCCGCTGGCCCCCTG
GCACAAACGTGGGGGCCCGGGGCTGCCTGGCTAGTGTGTGTAGCCGTGTGGCTGGCCGTGACAACCCAGTGCCT
GCCCACAGCCATCTTCGCTGCCACAGGCATCCAGCGTAACCGCACTGTCTGCTATGACCTCAGCCCGCTGCCCT
GGCCACCCACTATATGCCCTATGGCATGGCTCTCACTGTATCGGCTTCCTGCTGCCCTTTGCTGCCCTGCTGGC
CTGCTACTGTCTCCTGGCCTGCCGCTGTGCCGCCAGGATGGCCCGGCAGAGCCTGTGGCCCAGGAGCGGCGTGG
CAAGGCGGCCCCGCATGGCCGTGGTGGTGGCTGCTGCCTTTGCCATCAGCTTCCTGCCTTTTCACATCACCAAGAC
AGCCTACCTGGCAGTGCCTCGACGCCGGGCGTCCCCTGCACTGTATTGGAGGCCTTTGCAGCGGCTACAAAGG
CACGCGGCCGTTTGCCAGTGCCAACAGCGTGCTGGACCCCATCTCTTCTACTTCACCCAGAAGAAGTCCGCCG
GCGACCACATGAGCTCCTACAGAACTCACAGCCAAATGGCAGAGGCAGGGTCGCTGAGTCCTCCAGGTCCTGGG
CAGCCTTCATATTTGCCATTGTGTCCGGGGCACCAGGAGCCCCACCAACCCCAAACCATGCGGAGAATTAGAGTT
CAGCTCAGCTGGGCATGGAGTTAAGATCCCTCACAGGACCCAGAAGCTCACCAAAAACCTATTTCTTCAGCCCCCTT
CTCTGGCCCAGACCTGTGGGCATGGAGATGGACAGACCTGGGCCTGGCTCTTGAGAGGTCCAGTCAGCCATGG
AGAGCTGGGGAAACCACATTAAGGTGCTCACAAAATACAGTGTGACGTGTACTGTCA

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FIGURE 3326

CGCGTCCTGTCCCGGGCGCCTTCCGCGCACCGGGCCACCGCCAGTCTCCGAGCCCCGTGACCTGCAGGTCTCTCCGGC
CGCGACTCCGGGCGGGCCCTGCGTGGTGGCTGTGCGGGGGCGCGCGGGGAAGCAGCGGAACCTGCGGTGTGAGGG
GCCGGCGGGGGCCCGGAGCGGTCCCCGGCCCCGGGAACTTGGACCGAGACCAGGCCGGCGACCAACAGGGGCGCTGA
GGATGAAGCCAAGTCTGCTGTGCCGGCCCCCTGTCTGCTTCCCTTATGCTGCTGCCCTGGCCTCTCGCCACCCCTGA
CATCAACAACCCCTTTGGCAGTGCCACCTGGGGAGGAGCCCGACCTGGACCCAGGGCAGGGCACATTATGCAGGC
CCTGCCCCCAGGCACCTTCTCAGCTGCATGGGGCTCCAGCCCATGCCAGCCCCATGCCCGTTCAGCCCTTTGGA
GGAGGCTGGAGGGCCAGGTGGGCATGGCAACTCGAGATACTCTGTGGAGACTGCTGGCCTGGGTGGTTTGGGC
CTTGGGGGGTTCCCCGCGTTCCATGTCAACCATGTTCTGGGCACCTCTGGGTACTCATGGCTGTGATGAGTGGG
GGCGGGGGGGCCGACGTGGCGTGGAGGTGGCAGCAGGGGCCAGCAGCGGTGGTGAGACACGGCAGCCTGGGAACG
GCACCCGGGCAGGTGGCCAGAGGAGACAGCCGCCAGTACGCGGTTCATCGCCATCGTCCCTGTCTTCTGCCTCA
TGGGGCTGTTGGGCATCCTGGTGTGCAACCTCCTCAAGCGGAAGGGCTACCACTGCACGGCGCACAAGGAGGTTCG
GGCCCGGCCCTGGAGGTGGAGGCAGTGAATCAACCCTGCCTACCGGACTGAGGATGCCAATGAGGACACCATTG
GGGTCTGTGGTGCCTTGATCACAGAGAAGAAAGAGAATGCTGCGGCCCTGGAGGAGCTGCTGAAAGAGTACCACA
GCAAACAGCTGGTGCAGACGAGCCACAGGCCTGTGTCCAAGCTGCCGCCAGCGCCCCCGAACGTGCCACACATCT
GCCCCGACCGCCACCATCTCCACACCGTGCAGGGCCTGGCCTCGCTCTCTGGCCCCCTGCTGCTCCCGCTGTAGCC
AGAAGAAGTGGCCCCGAGGTGCTGCTGTCCCCTGAGGCTGTAGCCGCCACTACTCCTGTTCCAGCCCTTCTGCCTA
ACCCGACCAAGGGTTCCCAAGGCCGGGGCCAAGGCAGGGCGTACAGGGCGAGATCACCATCTTGTCTGTGGGCAGGT
TCCGCGTGGCTCGAATTCTTGAGCAGCGGACAAGTTCAATGGTGTCTGAGGTGAAGACCATCACGGAGGCTGGGC
CCTCGTGGGGTGATCTCCCTGACTCCCCACAGCCTGGCCTCCCCCTGAGCAGCAGGCCCTGCTAGGAAGTGGCG
GAAGCCGTACAAAGTGGCTGAAGCCCCCAGCAGAGAACAAGGCCGAGGAGAACCCTATGTGGTCCGGCTAAGTG
AGAGCAACCTGGTCACT**TG**AGGGGGCGGTCTAGTCTAAGGACACTGCGGCCCTGCCCTGGGAGGTTCCGAAGGCTT
CCTGGAGGAGGTGGAGCTGCAGCTGGGACTGTGAGGACCGAGAAGCAATGGCCCAGCAGACGAGACAGCAAAGAC
CAAGGCCTGGAGGTGGGAGCGTCTGCCCCAGTGAGGAGGCAGGTGGCCGGCGGGCACTGTGTACAGGAGCAGGCT
GAGCCCCGCCCCCTGGCCCCTGCTGCCATGTTGCTCCCCTGAAGGATGCCCCGACCCCCGTGCCCTGGCTGGCTGGA
TCCTAGGAGCCCCACGGGATTCTCTGTATCATCAGAGGCTGGGCTTGGCAGAGGGGAGGGGCTGTGCCCCGTCACC
CCTGGCCCCATTCTTTGGTAATTAGCCACACCCTTGCCCTCTKTACAGGGCCCTAAGARCAGATGTKCGTYCCCCCT
CCTYTTYCAGCAGGTCTATAAAGGGAAAGGGGTAGCAGAAAAGTCTGGGCTARGAGAGTGAGTCCCTGGGTTCT
AATCTTGGGCACATCTGTGSCCATCRCTGGGTCCATTTTTCTTACTGTGAAGTAAGGAGAGAMGTCTCAGTACCC
AGGGCCTCTTCAGCTCTTTGTAGGTTCTGGGCTGGGTTGTGGGGACTGGGGAGCTGGGCTTCTACCAATCCCCCT
CCCCAATTAGTAGCTTTTATCCAGCCCCCGTTTTTTGCTGCTTTCCAGGGCCTTCTGCCCTTCAAGGCCCCCATG
GGGCTTGTCCCATCCATGGCTCTGCCTACGGAAGGGGCTTAATGCATGTGCCTGCCCTCCCCAGCTGTTTTTA
ATGAACTGAAAAAATAGACTTGATCCCGGCAGGACTGTGATACAGAGCCCTAGCCCTGCCAGCCAGCCCCCAA
GATCTCAGGAGCTTTAGGGAGAAGACTTGGTGGGGCTGGAGCACACCTTGGGCCTTCAGTGGTTTCTGTGTCCCT
GTGGTGCCAGTGCTTCTGGGCAGTGACAGCGGCTGCCAGGCCAGCCCTGACTTCCACTCTGGCTCAGCAACCTG
GTTATTTATGTGGGGCCGTGCAGGCATGGGCCCCACTGCCTGTCCATCCTGTTTCTTTATTTATTGAACTCACC
ATTGCCCTATCCTTGTGTCTCCACCCCTTCCATGTGTTGAATAATAAAAGGTGGGAAAGTGCAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3327

MKPSLLCRPLSCFLMLLPWPLATLTSTTLWQCPPGEEPDLDPGQGTLCRPCPPGTFSAAWGSSPCQPHARCSLWR
RLEAQVGMATRDITLCGDCWPGWFGPWGVPRVPCQPCSWAPLGTHGCDEWGRRARRGVEVAAGASSGGETRQPGNG
TRAGGPEETAQYAVIAIIVPVFCLMGLLGILVCNLLKRKGYHCTAHKEVGP GPGGGSGINPAYRTEDANEDTIG
VLVRLITEKKENAAAEEELLKEYHSKQLVQTSHRPVSKLPPAPPNVPHICPHRHHLHTVQGLASLSGPFCCSRCSQ
KKWPEVLLSPEAVAATTPVPSLLPNPTRVPKAGAKAGRQGEITILSVGRFRVARIQRTSSMVSEVKTITEAGP
SWGDLPDSPQPLPPEQQALLGSGGSRTKWLKPPAENKAEENRYVVRLSESNLVI

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FIGURE 3328

CTTTCCTCCTGCCGCCGAGTCGCGCGGAGGCGGAGGCTTGGGTGCGTTCAAGATTCAGGTTACCCGTAACCCA
CTGCCATGGCCGAGGAAGGCATTGCTGCTGGAGGTGTAATGGAGGTTAATACTGCTTTACAAGAGGTGCTGAAGA
CCGCCCTCATCCACGATGGCCTAGCACGTGGAATTCGCGAAGCTGCCAAAGTCTTAGACAAGCGCCAAGCCCATC
TTTGTGTGCTTGCACTCCAACGTGTGATGAGCCTATGTATGTCAAGTTGGTGGAGGCCCTTTGTGCTGAACACCAAA
TCAACCTAATTAAGGTTGATGACAACAAGAACTAGGAGAATGGGTAGGCCTCTGTAAAATTGACAGAGAGGGGA
AACCCCATAAAGTGGTTGGTTACAGTTGTGTAGTAGTTAAGGACTATGGCAAGGAGTCTCAGGCCAAGGATGTCA
TCGAAGAGTATTTCAAATGCAAGAAATGAAGAAATAAATCTTTGGCTCAC

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FIGURE 3329

GGCGGCGGCAGCTGTACAGGGCGGGAGAACGGTGGTAGCGGAGGCTGTAGTGGGGCTGGTGGTGCTTCCAAC TG
CGGGACAGGAAGTGGCCGTAGCGGCTTGTTGGATAAGTGGGAAGATAGATGATAAGCCTGTAAAAATTGACAAGTG
GGATGGATCAGCTGTGAAAACTCTTTGGATGATTCTGCCAAAAAGGTACTTCTGGAAAAATACAAATATGTGGA
GAATTTTGGTCTAATTGATGGTCGCTCACCATCTGTACAATCTCCTGTTTCTTTGCCATAGTGGCTTTGATTTG
GGATTATATGCACCCCTTTCCAGAGTCCAAAACCCGTTTTGGCTTTGTGTGTCATATCCTATTTTGTGATGATGGG
GATTCTGACCATTATACCTCATATAAGGAGAAGAGCATCTTCTCGTGGCCACAGGAAAGATCCTACAGGAAT
GGATCCTGATGATATTTGGCAGCTGTCCTCCAGTCTTAAAAAGGTTTGATGACAAATACACCTTGAAGCTGACCTT
CATCAGTGGGAGAACAAAGCAGCAGCGGGAAGCCGAGTTCACAAAGTCCATTGCTAAGTTTTTTGACCACAGTGG
GACACTGGTCATGGATGCATATGAGCCTGAAATATCCAGGCTCCATGACAGTCTTGCCATAGAAAGAAAAATAAA
GTAGCCAATTCTAAAAGTAGCCCTCTTCTCCTGGATCTTGCTGAATTAGTGGCTTGGGGGGTGGGGGAGATAAA
AAGAACTTAAATGGGTAAAGTAAGAAATGTTAAAAAGTCCCTGTTTGTCTGAAATTTTAGTCTATTCTGGGT
AAATAGGATTTTCTGACACAGATATGAGAAGTTGTAGCTCTGATGTCTAGCTGTAGTCTCCTTGATCTGCTGATT
GCATTATTTTAATTTGCTTTTCTGGGAAAGCAGTTTTGCTAAAAGCTGTACAGACTTTTTCTTTTGTACCTAGCA
GTACTTTATATAGTATAGCTTTGGGCCATGTAGCATTTTAAGACTCAATTTTAAAAAATTATTAATCTGTTGCTG
ACTCTTAATTCCTATTTCAATATGTGTTTCCTTGAAGAATTCAGGATACAACCTTCTTGTGTATGACAGCTTTTCT
TCACACACTATTTTTGTGGGTGTGTATATCTGATTTGGGAAGAATTTAAAAAACACATAGCTTTTTAATTTGT
TTGAAACAGACTTTCTGCCTGTTACATTTTTGCTTTTAACCAATTAAAGAAGCCAATGGCATTTTAGTTTTATAT
TGTGTTTTCCACTAGTATATCCCTGTTGATTTGTTGTGCCTTTTATTAAGTCCATTTTCTAAAATTTTTTTCA
ATAAAAGGAAGGAAGATGTG

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FIGURE 3330

MHPFPESKPV LALCVISYFVMMGILTIYTSYKEKSIFLVAHRKDPTGMDPDDIWQLSSSLKRFDDKYTLKLTFIS
GRTKQQREAEFTKSI AKFFDHSGTLVMDAYEPEISRLHDSLAIERKIK

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FIGURE 3331

GCGGAGCGCGGCGGCAAGATGGCAGTGCAAATATCCAAGAAGAGGAAGTTTGTGCTGATGGCATCTTCAAAGCT
GAACTGAATGAGTTTCTTACTCGGGAGCTGGCTGAAGATGGCTACTCTGGAGTTGAGGTGCGAGTTACACCAACC
AGGACAGAAATCATTATCTTAGCCACCAGAACACAGAATGTTCTTGGTGAGAAGGGCCGGCGGATTGCGGAACTG
ACTGCTGTAGTTTCAAGAAGAGGTTTGGCTTTCCAGAGGGCAGTGTAAGCTTTATGCTGAAAAGGTGGCCACTAGA
GGTCTGTGTGCCATTGCCAGGCAGAGTCTCTGCGTTACAAACTCCTAGGAGGGCTTGCTGTGCGGAGGGCCTGC
TATGGTGTGCTGCGGTTTCATCATGGAGAGTGGGGCCAAAGGCTGCGAGGTTGTGGTGTCTGGGAACTCCGAGGA
CAGAGGGCTAAATCCATGAAGTTTGTGGATGGCTGATGATCCACAGCGGAGACCCTGTAACTACTACGTTGAC
ACTGCTGTGCGCCACGTGTTGCTCAGACAGGGTGTGCTGGGCATCAAGGTGAAGATCATGCTGCCCTGGGACCCA
ACTGGTAAGATTGGCCCTAAGAAGCCCCTGCCTGACCACGTGAGCATTGTGGAACCCAAAGATGAGATACTGCCC
ACCACCCCCTCTCAGAACAGAAGGGTGGGAAGCCAGAGCCGCTGCCATGCCCCAGCCAGTCCCCACAGCATAA
CAGGGTCTCCTTGGCAGCTGTATTCTGGAGTCTGGATGTTGCTCTCTAAAGACCTTTAATAAAATTTGTACAAA
GACAAAAAAAAAAAAAAAAA

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FIGURE 3332

MAVQISKRRKFVADGIFKAELNEFLTRELAEDGYSGVEVRVTPTRTEIIILATRTQNVLGEKGRRIRELTAVVQK
RFGFPEGSVELYAEKVATRGLCAIAQAESLRYKLLGGLAVRRACYGVLRFIMESGAKGCEVVVSGKLRGQRAKSM
KFVDGLMIHSGDPVNYVDTAVRHVLLRQGVLGIVKIMLPWDPTGKIGPKKPLPDHVSIVEPKDEILPTTPISE
QKGGKPEPPAMPQPVPTA

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FIGURE 3333

GTGCGGGCTCGAGAGCGAGAGTCACGTCCCGGGCGCTAGCCCAGCCGACCCAGGCCCCACCGTGGTGCACGCAAAC
CACTTCCTGGCCATGCGCTCCCTCCTGCTTCTCAGCGCCTTCTGCCTCCTGGAGGCGGCCCTGGCCGCCGAGGTG
AAGAAACCTGCAGCCGCGAGCAGCTCCTGGCACTGCGGAGAAAGTTGAGCCCCAAGGCGGCCACGCTTGCCGAGCGC
AGCGCCGGCCTGGCCTTACGCTTGTAACAGGCCATGGCCAAGGACCAGGCAGTGGAGAACATCCTGGTGTACCCC
GTGGTGGTGGCCTCGTCGCTGGGGCTCGTGTGCTGGGCGGCAAGGCGACCACGGCGTCGCAGGCCAAGGCAGTG
CTGAGCGCCGAGCAGCTGCGCGACGAGGAGGTGCACGCCGGCCTGGGCGAGCTGCTGCGCTCACTCAGCAACTCC
ACGGCGCGCAACGTGACCTGGAAGCTGGGCAGCCGACTGTACGGACCCAGCTCAGTGAGCTTCGCTGATGACTTC
GTGCGCAGCAGCAAGCAGCACTACAACCTGCGAGCACTCCAAGATCAACTCCGCGACAAGCGCAGGCCGCTGCAG
TCCATCAACGAGTGGGCCGCGCAGACCACCGACGGCAAGCTGCCCCGAGGTACCAAGGACGTGGAGCGCACGGAC
GGCGCCCTGTTAGTCAACGCCATGTTCTTCAAGCCACACTGGGATGAGAAATCCACCACAAGATGGTGGACAAC
CGTGGCTTCATGGTGACTCGGTCTTATACCGTGGGTGTCATGATGATGCACCGGACAGGCCCTCTACAACACTAC
GACGACGAGAAGGAAAAGCTGCAAATCGTGGAGATGCCCCTGCCCCACAAGCTCTCCAGCCTCATCATCCTCATG
CCCCATCACGTGGAGCCTCTCGAGCGCCTTGAAAAGCTGCTAACCAGAGCAGCTGAAGATCTGGATGGGGAAG
ATGCAGAAGAAGGCTGTTGCCATCTCCTTGCCCAAGGGTGTGGTGGAGGTGACCCATGACCTGCAGAAACACCTG
GCTGGGCTGGGCCTGACTGAGGCCATTGACAAGAACAAGGCCGACTTGTCACGCATGTCAGGCAAGAAGGACCTG
TACCTGGCCAGCGTGTTCCACGCCACCGCCTTTGAGTTGGACACAGATGGCAACCCCTTTGACCAGGACATCTAC
GGGCGCGAGGAGCTGCGCAGCCCCAAGCTGTTCTACGCCGACCACCCCTTCATCTTCCTAGTGCGGGACACCCAA
AGCGGCTCCCTGCTATTCAATTGGGCGCCTGGTCCGGCCTAAGGGTGACAAGATGCGAGACGAGTTATAGGGCCTC
AGGGTGCACACAGGATGGCAGGAGGCATCCAAGGCTCCTGAGACACATGGGTGCTATTGGGGTTGGGGGGGAGG
TGAGGTACCAGCCTTGATACTCCATGGGGTGGGGGTGAAAAGCAGACCGGGGTTCCTCGTGTGCTGAGCGGAC
CTTCCCAGCTAGAATTCACCTCACTTGACATGGGCCCCAGATACCATGATGCTGAGCCCCGAAACTCCACATCC
TGTGGGACCTGGGCCATAGTCATTCTGCCTGCCCTGAAAGTCCCAGATCAAGCCTGCCTCAATCAGTATTCATAT
TTATAGCCAGGTACCTTCTCACCTGTGAGACCAAATTGAGCTAGGGGGGTGAGCCAGCCCTCTTCTGACACTAAA
ACACCTCAGCTGCCTCCCCAGCTCTATCCCAACCTCTCCCAACTATAAACTAGGTGCTGCAGCCCCCTGGGACCA
GGCACCCCCAGAATGACCTGGCCGCGAGTGAGGCGGATTGAGAAGGAGCTCCAGGAGGGGGCTTCTGGGCAGACTC
TGGTCAAGAAGCATCGTGTCTGGCGTTGTGGGGATGAACTTTTTGTGTTTCTTCCTTTTTTAGTTCTTCAAA
GATAGGGAGGGAAGGGGAACATGAGCCTTTGTTGCTATCAATCCAAGAACTTATTTGTACATTTTTTTTTTCAA
TAAACTTTTTCCAATGACATTT

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FIGURE 3334

MRSLLLLSAFCLLEAALAAEVKKPAAAAAPGTAEKLSPKAATLAERSAGLAFSLYQAMAKDQAVENILVSPVVVA
SSLGLVSLGGKATTASQAKAVLSAEQLRDEEVHAGLGELLRSLNSTARNVTWKLGSRLYGPSSVSFADDFVRSS
KQHYNCEHSKINFRDKRRPLQSINEWAAQTDDGKLPEVTKDVERTDGALLVNAMFFKPHWDEKFHHKMVDNRGFM
VTRSYTVGVMMHRTGLYNYDDDEKEKLQIVEMPLAHKLSSLIILMPHHVEPLERLEKLLTKEQLKIWMGKMQKK
AVAISLPKGVVEVTHDLQKHLAGLGLTEAIDKNKADLSRMSGKKDLYLASVFHATAFELDTDGNPFDQDIYGREE
LRSPKLFYADHPFIFLVRDTQSGSLLFIGRLVRPKGDKMRDEL

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FIGURE 3335A

TTGATTTGGTATAGTGGGAACATTTGCTTTGGAGACAGATGAACTGGATTCTGATCGTGACCCTGCTATTTTCTC
CTTGTTGACTTTGGAGCCATGAGACCCAGATCCTGCTGCTCCTGGCCCTGCTGACCCTAGGCCTGGCTGCACA
ACACCAAGACAAAGTGCCCTGTAAGATGGTGGACAAGAAGGTCTCGTGCCAGGTTCTGGGCCTGCTCCAGGTCCC
CTCGGTGCTCCCGCCAGACACTGAGACCCCTGATCTATCTGGGAACCAGCTGCGGAGTATCCTGGCCTCACCCCT
GGGCTTCTACACAGCACTTCGTACCTGGACCTGAGCACCAATGAGATCAGCTTCCTCCAGCCAGGAGCCTTCCA
GGCCCTGACCCACCTGGAGCACCTCAGCCTGGCTCACAACCGGCTGGCGATGGCCACTGCGCTGAGTGCTGGTGG
CCTGGGCCCCCTGCCACGCTGACCTCCCTGGACCTGTCTGGGAACAGCCTGTACAGCGGCCTGCTGGAGCGGCT
GCTGGGGGAGGCACCCAGCCTGCATACCCCTCACTGGCGGAGAACAGTCTGACTGCGCTCACCCGCCACACCTT
CCGGGACATGCCTGCGCTGGAGCAGCTTGACCTGCATAGCAACGTGCTGATGGACATCGAGGATGGCGCCTTCGA
GGGTCTGCCCCGCTGACCCATCTCAACCTCTCCAGGAATCCCTCACCTGCATCTCCGACTTCAGCCTCCAGCA
GCTGCGGGTGTAGACCTGAGCTGCAACAGCATCGAGGCCTTTCAGACGGCCTCCAGCCCCAGGCTGAGTTCCA
GCTCACCTGGCTTGACCTGCGGGAGAACAACCTGCTCCATTTCCTCGACCTGGCCGCGCTCCCGAGACTCATCTA
CCTGAACTTGTTCAACAACCTCATCCGGCTCCCCACAGGGCCACCCAGGACAGCAAGGGCATCCACGCACCTTC
CGAGGGCTGGTCAGCCCTGCCCTCTCAGCCCCAGCGGAATGCCAGCGCCGCCCTTTCAGCTCTTGAA
TCTGGATTTGAGCTACAATGAGATTGAGCTCATCCCCGACAGCTTTCTTGAGCACCTGACCTCCCTGTGCTTCCT
GAACCTCAGCAGAACTGCTTGCGGACCTTTGAGGCCCGCGCTTAGGCTCCCTGCCCTGCCTGATGCTCCTTGA
CTTAAGCCACAATGCCCTGGAGACACTGGAAGTGGGCGCCAGAGCCCTGGGGTCTCTGCGGACGCTGCTCCTACA
GGGCAATGCCCTGCGGGACCTGCCCCATACACCTTTGCCAATCTGGCCAGCCTGCAGCGGCTCAACCTGCAGGG
GAACCGAGTCAGCCCTGTGGGGGGCCAGATGAGCCTGGCCCTCCGGCTGTGTGGCCTTCTCCGGCATCACCTC
CCTCCGAGCCTGAGCCTGGTGGATAATGAGATAGAGCTGCTCAGGGCAGGGGCCCTCCCTCCACACCCCACTGAC
TGAGCTGGACCTTTCTTCCAATCCTGGGCTGGAGGTGGCCACGGGGGCCCTGGGAGGGCTGGAGGGCTCCTTGA
GGTCTTGGCACTGCAGGGCAACGGGCTGATGGTCTGCAGGTGGACCTGCCCTGCTTCATCTGCCTCAAGCGGCT
CAATCTTGCCGAGAACCGCTGAGCCACCTTCCCGCCTGGACACAGGCTGTGTCACTGGAGGTGCTGGACCTGCG
AAACAACAGCTTCAGCCTCCTGCCAGGCAGTGCCATGGGTGGCCTGGAGACCAGCCTCCGGCGCTCTACCTGCA
GGGGAATCCACTCAGCTGCTGCGGCAATGGCTGGCTGGCAGCCAGCTGCACCAGGGCCGTGTGGACGTGGACGC
CACCCAGGACCTGATCTGCGCTTCAGCTCCCAGGAGGAGGTGTCCCTGAGCCAGTGCGTCTTGAGGACTGTGA
GAAGGGGGGACTGAAGAACATCAACCTCATCATCTCCTCACCTTCATACTGGTCTCTGCCATCCTCCTCACCA
GCTGGCCGCTGCTGCTGCGTCCGCCGGCAGAAGTTAACCAACAGTATAAAGCCTAAAGAAGCCGGGAGACACT
CTAGGTGAGTGGGGGAGCCTGAGGTACAGAGAAGAGTGAGGACTGACTCAAGGTACACAGTGATCCGGGATCCC
AGAATCTGGTCTCCAAATTACAGCCAGGACACCTTTCTGTCGCGCTGCTGCATCAGTGGGTGACCCCTTCC
CGGGCTGCACCTTTGGGTCCAGCTGTGGAAGCCAGAAGTTGGGCGGTTTCAGGGACAGCCGAGAATAATGTTGACC
TGTCAGATCAACAAATCTTCACTGAGCATGTATTTTGTGCCACACCTGCTCTGGGCACTGGGAATGCTGGGAAA
TGAGATACATTCCCGCCCTCAAGAATCTCCAGTCTGGTAGGAGAGAGTGCTGCAGAGCCAGTGCCGCCACGC
AGTGTGCTTAGGGCCTGAGGTGTGAAAGCCAGGGCTCCAGAGCTCGGCAGGCCCGCTGGTTTGGTGCCTGAG
TCCTGCCCCGGCTGTGCCAGGGTGAGGGAGGGCCAAGCCCAGGAGGATTGTCTGAGACATTTCCAAGCAGACTG
TTTGTACAGTCTTCTGAGAATGACTTTTCACTCTCTGAAAATGAAAAGCTTAGGACCAGAAGAGAGAATTGGAG
CTGTACGAGTGTGTCTCGGATCTGGTGTGTAGGTGGGCCACGGCGGCTCCAGCAGGGTCTGGTTAAGGGGTCC
AGCCAGCACTGGACCAATTCCGTCTCCTGCTCTGGACTTGCCCTCTCCCTTCTGGCACTCTCATGTTGCATACC
CTGACCCCACTGCTGCTCTAAGCACCGTCCCTGCCAGCCCCACTTCTCCATCGCAGCCCCACCTTGGCTGCTGA
GCCAGGAGCTAAACCTTAGATATCTGGTTCTGTTTTGCACCCAGCTTGGCAGATGTGGATTTGAATCCAAGCCT
TGTGTCTGCCCCATGTGACAGCTCTATATTTTATCCCCGTTTTATAAAAGAGGAACTGAAGTTCTGAAAATCT
CCTTCCAGGGCCCCAGCTAACTAATGCCATAGGTGAGATTCAAACCTTCATCCTTCTGTCTCCAGGGCCTGATCT
TTACCACTGCAGGGGCTGCAGGCCGTTAAGTGGACAGGAAGTGGCCCCACATAGCCCCAGGGTCTGGAAACA
TCCTGTGCTGTGCACACCTGCTCTCTCTCTCTCCAGGCAGGCACTGCAGGCGCTCTCCTCCTTCTCTGCTG
TTTCCCTCCTCCCTTCCTTTCCACCTGGTGTGGGTTCTCCTGTTCTCTGTGCTCTTGCACTCTCATTTCCC
TTTCTCTATTGAGCAGAGCCTGGAGTTTGGAGCTATGGAATCCAACCTCCCATTGCACAGATGGGGAACTG
AGGCTTAGGAAGAGAATGAACTTGTGGAGAGCTTATACAGAGCCTCTGGGGGAAAAAGAGCCCTTATTTGTGG
GGTGAGATTGGGGGTTGGACCAGAGTGATGTCTCTCTCAGCTATCACATCACAAGATAATGCTGGCTCCAACT

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FIGURE 3335B

TCCTTTCTGTGCCTCATCATGCAAGGATCTTTTTTCCCTCTTACAAAAACAGGTAAAAAGCCTCACCCAGATGAC
CCCCATCCCTCATACCATGGAGTCATGAGCTGTCTGGGAAGAATGGACGTGCTGGGACCAACTCAAGACCTTGTT
TTGCTGTCTTCATCATCTTACCTGTGCTTGGCCACAGTCTGGCTCATGATGTGGGCTCAGTAATGTGCGAGAAA
GTGAAAATGCCACTCTCTCCACCCCATTTTACAGAGGAGAACACCAAGGCCAGAGGAAGTTAAGGGAGAGTCAA
TGGGCAGAGCCAGGGCTAGGCCCTGGTGGTGTGTGGAGCACCCAGGCAGACCCAGTCCTGGTTGGGATCACACCC
ACGGGTGCTACTGCACGTAACACTCCTCCTTAGGCCTGGAGGCCAAGGTGTGGGTCCCCACGCCTGATCTTTGAA
AACACTACACAGGGCTGCTGTCACTTCCCAGGGCCCAGGCCTCAGCCCAGGCCTCGGGACCAACTCTTTGTATAA
CCTACCTGAATGTATTAAAACTAATTTTGG

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FIGURE 3336

ATGGATAGAATGGTGCTATCTGAGCTGTTATAATGTTGGCCTCATGCCTAGCTTTATATTGCAGCACGTCTGAGG
CATTGGTTTTTTCATCCTTCCAAACTTTTGGTCTACAGAGACTATTAGAAGATTAAAGTAGCTGCTGCTGGTGGTGA
CAATGTCAAATAACGGCCTAGACATTCAAGACAAACCCCGAGCCCTCCGATGAGAAATACCAGCACTATGATTG
GAGCCGGCAGCAAAGATGCTGGAACCTAAACCATGGTTCTAAACCTCTGCCTCCAAACCCAGAGGAGAAGAAAA
AGAAGGACCGATTTTTACCGATCCATTTTACCTGGAGATAAAACAAATAAAAAGAAAGAGAAAGAGCGGCCAGAGA
TTTCTCTCCCTTCAGATTTTGAACACACAATTTCATGTCGGTTTTTGATGCTGTACAGGGGAGTTTACGGGAATGC
CAGAGCAGTGGGCCCCGCTTGCTTCAGACATCAAATATCACTAAGTCGGAGCAGAAGAAAAACCCGCAGGCTGTTT
TGGATGTGTTGGAGTTTTACAACCTCGAAGAAGACATCCAACAGCCAGAAATACATGAGCTTTACAGATAAGTCAG
CTGAGGATTACAATTCTTCTAATGCCTTGAATGTGAAGGCTGTGTCTGAGACTCCTGCAGTGCCACCAGTTTCAG
AAGATGAGGATGATGATGATGATGATGCTACCCACCACCAAGTGATTGCTCCAGCCCAGAGCACACAAAATCTG
TATACACACGGTCTGTGATTGAACCACTTCTGTCACTCCAACCTCGGGACGTGGCTACATCTCCCATTTTCACCTA
CTGAAAAATAACCACTCCACCAGATGCTTTGACCCGGAATACTGAGAAGCAGAAGAAGAAGCCTAAAAATGTCTG
ATGAGGAGATCTTGGAGAAATTACGAAGCATAGTGAGTGTGGGCGATCCTAAGAAGAAATATACACGGTTTGAGA
AGATTGGACAAGGTGCTTCAGGCACCGTGTACACAGCAATGGATGTGGCCACAGGACAGGAGGTGGCCATTAAAGC
AGATGAATCTTCAGCAGCAGCCCCAAGAAAGAGCTGATTATTAATGAGATCCTGGTCATGAGGGAAAACAAGAACC
CAAACATTGTGAATTACTTGGACAGTTACCTCGTGGGAGATGAGCTGTGGGTTGTTATGGAATACTTGGCTGGAG
GCTCCTTGACAGATGTGGTGACAGAACTTGCATGGATGAAGGCCAAATTGCAGCTGTGTGCCGTGAGTGTCTGC
AGGCTCTGGAGTTCTTGCAATCGAACCAGGTCATTCACAGAGACATCAAGAGTGACAATATTCTGTTGGGAATGG
ATGGCTCTGTCAAGCTAACTGACTTTGGATTCTGTGCACAGATAACCCCGAGAGCAGAGCAAACGGAGCACCATGG
TAGGAACCCCATACTGGATGGCACCAGAGGTTGTGACACGAAAGGCCATATGGGCCCAAGGTTGACATCTGGTCCC
TGGGCATCATGGCCATCGAAATGATTGAAGGGGAGCCTCCATACCTCAATGAAAACCTCTGAGAGCCTTGTACC
TCATTGCCACCAATGGGACCCAGAACTTCAGAACCCAGAGAAGCTGTGAGCTATCTTCCGGGACTTTCTGAACC
GCTGTCTCGAGATGGATGTGGAGAAGAGAGGTTTCAGCTAAAGAGCTGCTACAGGTGAGAAAACCTGAGGTTTCAAG
TGTTTAGTAACTTTTCCATGATAGCTGCATCAATTCTGAAAGATTGCCAAGCCCCCTCTCCAGCCTCACTCCACTG
ATTGCTGCAGCTAAGGAGGCAACAAAGAACAATCACTAAAACCACTACCCAGCCTCATTGTGCCAAGCCTT
CTGTGAGATAAATGCACATTTTCAGAAATTCCAACCTCCTGATGCCCTCTTCTCCTTGCTTCTCCCATTTCC
TGATCTAGCACTCCTCAAGACTTTGATCCTTGAAACCGTGTGTCCAGCATTGAAGAGAAGTGAACCTGAATG

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FIGURE 3337

GTGACTGCCTCTTCCAGGGCGGGCGGTGTGGTGCACGCATTGCTGTGCTCCAACCTCCCTCAGGGCCTGTGTTGCC
GCACTCTGCTGCTATGAGCTTCTCTCAAAAGTTTCCCGCCGCCTGGGCCAGCGGAGGGGCTCCTGCGGCAGCAGCC
AGACACTGAGGCTGTGCTGAACGGGAAGGGCCTCGGCACTGGTACCCTTTACATCGCTGAGAGCCGCCTGTCTTG
GTTAGATGGCTCTGGATTAGGATTCTCACTGGAATACCCACCATTAGTTTACATGCATTATCCAGGGACCGAAG
TGACTGTCTAGGAGAGCATTGTATGTTATGGTGAATGCCAAATTTGAAGAAGAATCAAAAGAACCTGTTGCTGA
TGAAGAAGAGGAAGACAGTGATGATGATGTTGAACCTATTACTGAATTTAGATTTGTGCCTAGTGATAAATCAGC
GTTGGAGGCAATGTTCACTGCAATGTGCGAATGCCAGGCCTTGCAATCCAGATCCTGAGGATGAGGATTCAGATGA
CTACGATGGAGAAGAATATGATGTGGAAGCACATGAACAAGGACAGGGGGACATCCCTACATTTTACACCTATGA
AGAAGGATTATCCCATCTAACAGCAGAAGGCCAAGCCACACTGGAGAGATTAGAAGGAATGCTTTCTCAGTCTGT
GAGCAGCCAGTATAATATGGCTGGGGTCAGGACAGAAGATTCAATAAGAGATTATGAAGATGGGATGGAGGTGGA
TACCACACCAACAGTTGCTGGACAGTTTGAGGATGCAGATGTTGATCACTTGAAAATGATTTATGCAAGTTTAAGA
TTCTGCTCCTAAGTGTAGGAGAGAACTTGGTGCCTCTTCCACTCTGGAGTGAAGTTAATGAAAGTCTTTTTCCTT
TTCCAAAACCCAACTGAACCAAGTTCTTTCTTGAGACAGACTATACTGAGACAACAAGTTGTCACCAGCAGAAGA
TAGATAATATGACCTTTATTAACTTGATGAATTAACCTTAACCAAGAGGGTATTTGTAGTTTACTATTTACCCTAA
AACTTTCTGTGCTGGGTACCCCTCTGAGTAGGCCTATAATTCCTACCTTGACTGTGTGCATCATTTGTAAGCTAG
CAGATCTATGTGGTGAAAATGCACAGGAGCTTGGTAGACTGCGGGGAAAGAGAGAGCTCCTTTGCCATGTTTT
ACCAGTCTGCTGTTATAACCTCTTAGGTTGTATCCTTTAATTTCCAGCCTTTTAGGTTAGTTTCTGTAACAGAAC
AAGTGAGTCTGGGATGAAGTCCTCAAAGTACTTCAAATGGTAATTGTTTTGTTTTGTAAATAGCTTAACAAATAA
ACCTAGGTTTTCTATAAA

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FIGURE 3338

MSFLKSFPFPGPAEGLLRQQPDTEAVLNGKGLGTGTLYIAESRLSWLDGSGLGFSLEYPTISLHALSRDRSDCLG
EHLVVMVNAKFEEESKEPVADEEEEDSDDDDVEPITEFRFVPSDKSALEAMFTAMCECQALHPDPEDEDSDDYDGE
EYDVEAHEQQQGDIPTFYTYEEGLSHLTAEGQATLERLEGMLSQSVSSQYNMAGVRTEDSIRDYEDGMEVDTTPT
VAGQFEDADV DH

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FIGURE 3339

CGTTCTTTGCCGAGAGTCGTCGGGGTTTCCTGCTTCAACAGTGCTTGGACGGAACCCGGTGCTCGTCCCCCACC
CAGCCGGCCGCCGCCACCTCTCCTTAGTCGCCGCCATGAGGACCACGTCCACCTCACAGGTGCGCCAGAACTACC
ACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAACCTAGAGCTCTGTGCCTCCTACGTTTACCTGTCCATGT
CTTACTGCTTTGACCGTGATGATGTGGCTTTGAAGAACTTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGA
GGGAGCATGCTGAGAAACTGATGAAGCTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGATATCAAAAAAC
CAGACTGTGATGACTGGGAGAGCGGGCTGAATGTGATGGAGTGTGCATTACATTTGGAAAAAATGTGAATCAGT
CACTACTGGAAGTGCACAAATTGGCCACTGACAAAAATGACCCCCATTTGTGTGACTTCATTGAGACACATTACC
TGAATGAGCAGGTGAAAGCCATCAAAGAATTGGATGACCATGTGACCAACTTGACAAAGATGGGAGCACTCGAAT
CTGGCTTGGCAGAAATATCTCTTTGACAAGCACACCCTGGGAGACAGTGATAATGAAAGCTAAGCCTCGGCTAATT
TCCCCGTAGCCGTGGGGTGACTTCCCTGGTCACCAAGGCAGTGCATGCATGTTGGGGTTTCCTTTACCTTTTCTA
TAAGTTGTACCAAAACATCCACCTAAGTTCTTTGATTGTGCCATTCCCTTCAGATGAAGAAATTTGGTACCCCCC
CCCCAAAAAAAAAAAAAAAAAATC

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FIGURE 3340

MTTASTSQVRQNYHQDSEAAINRQINLELYASYVYLSMSYYFDRDDVALKNFAKYFLHQSHEEREHAEKLMKLQN
QRGGRIFLQDIKKPCDDWESGLNAMECALHLEKNVNQSLLELHKLATDKNDPHLCDFIETHYLNEQVKAIKELG
DHVTNLRKMGAPESGLAEYLFDKHTLGSDNES

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FIGURE 3341

GTCGTCGTGGTTTTTCCTTGTAGTTTCGTGGTCTGAGACCAGGCCTCAAGTGGAACGGCGTCACCATGATCGCACG
GCGGAACCCAGAACCCTTACGGTTTTCTGCCGGATGAGGCCCGGAGCCTGCCCCGCCCAAGCTGACCGACCCGCG
GCTCCTCTACATCGGCTTCTTGGGCTACTGCTCCGGCCTGATTGATAACCTAATCCGGCGGAGGCCGATCGCGAC
GGCTGGTTTGCATCGCCAGCTTCTATATATTACGGCCTTTTTTTTTTGGCTGGATATTATCTTGTAACGTTGAAGA
CTACCTGTATGCTGTGAGGGACCGTGAAATGTTTGGATATATGAAATTACATCCAGAGGATTTTCTGAAGAAGA
TAAGAAAACATATGGTGAAATTTTTGAAAAATTCCATCCAATACGTTGAAGTCTTCAAATGCTTGCTCCAGTTT
CACTGATACCTGCTGTTTCTGAATTTGATGGAACATGTTTCTTATGACAGTTGAAGCTTATGCTAATCTGTATGT
TGACACCTTGAATTAAAATACGTACCATG

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FIGURE 3342A

ATGAGCGGCGGCGGCGACGTGGTGTGCACCGGCTGGCTGAGGAAATCGCCTCCCAGAGAAGATTGAGGCGCTAT
GCCTGGAAGAAACGCTGGTTTATCCTGCGGAGTGGCCGATGAGCGGTGACCCAGATGTTCTGGAATACTACAAG
AACGATCACTCCAAGAAGCCTCTGCGGATCATCAACCTGAACCTTCTGTGAGCAGGTAGATGCAGGCCTGACCTTT
AACAAGAAGGAGCTGCAGGATAGTTTTGTGTTTGACATCAAGACCAGTGAACGCACCTTTTACCTGGTGGCTGAG
ACAGAAGAGGACATGAATAAGTGGGTCCAGAGCATCTGCCAGATCTGTGGCTTCAATCAGGCTGAGGAGAGCACA
GACTCCCTGAGAAATGTTTCTCAGCCGGTCATGGCCCCGCTCTTCTCCAGCTGAGCTCAGCAGCTCTAGCCAG
CACCTTCTCCGAGAGCGCAAGTCCTCAGCCCCATCACACTCCAGCCAGCCAACCTCTGTTACGTTTGAACCCCT
GTGTCAAACCACATGCAGCCACCTTGTCACCAGCGCACCTCAGGAGTATCTCTACTTGCACCAGTGCATAAGC
CGAAGAGCAGAAATGCAAGGAGTGCCAGCTTCTCTCAGGGCACCAGAGCCTCTTTTCTCATGAGGAGTGACACA
GCTGTACAAAACTTGCCAGGGCAATGGACACTGTGTCAACGGGATCAGTGGTCAAGTCCATGGCTTCTATAGC
CTTCCCAAGCCGAGCCGGCACAATACAGAATTCAGAGACAGTACCTACGACCTCCCCCGCAGCCTGGCCTCCCAT
GGCCACACCAAGGGCAGCCTCACAGGCTCCGAGACAGATAATGAGGATGTGTACACCTTCAAGACGCCAGCAAC
ACCCTGTGCAGGGAGTTCCGGGACCTCCTGGTAGACAATATGGATGTTCCGGCCACCCCACTCTCAGCCTACCAG
ATCCCTAGGACATTCACTCTGGACAAAAACCACAATGCCATGACAGTGGCCACTCCTGGGGACTCAGCCATAGCT
CCCCACCCCGCCCCCCCCAAGCCAAGTCAGGCAGAAACACCTCGATGGGGCAGTCTCTCAGCAGAGACCGCCAATC
AGTGAATAATAGCAGATCTGTGCTGCCACCATCCCCAGACGCAACACCCCTCCCTGCAATGGACAACAGCCGACTT
CACCGAGCTTCTTCTGTGAGACCTACGAGTACCCACAGCGTGGTGGAGAGAGTGCAGGCCGGTCTGCTGAATCC
ATGAGTGATGGAGTTGGCTCTTCTCCTGCCAGGGAATGATTGTGGGCCGATCGGACAGCACCAATTCTGAAGAC
AACTATGTGCCCATGAATCCAGGTTCTTCCACCTGTTGGCCATGGAACGAGCAGGTGATAATCCCAGAGCGTC
TACATCCCAATGAGCCAGGGGCCCCATCACTTGTACTCACTTGGCTACCCATCAACAACCCCTTCTGTGCACCGA
GGCCCCAGCAGAGGAAGTGAGATTGAGCCACCCCTGTCAACCGCAACCTCAAACCTGATCGGAAAGCAAAGCCA
ACACCACCTTGACCTGAGGAACAACACCGTCAATCGATGAACTCCCTTCAAGTCACCTATCACCAAGTCTTGGTCT
AGGGCCAACCACACCTTCAACTCCAGCTCCTCCAGTACTGCCGCCCCATCTCCACCCAGAGCATCACAGCACA
GACTCAGGAGACAGCGAAGAGAATATGTCCCTATGCAAAACCCAGTGTCTGCATCTCCCGTTCCAGTGGCAG
AACAGTCTGCCCTAAGAAGAGCACCAGGAGCGTTGATTATCTGGCCCTGGACTTCCAGCCGAGCTCCCCAAGC
CCCCACCGCAAGCCATCTACTTCTATCCGTCACTCTGATGAGAAGGTGGACTACGTTTCCAGGTGGACAAGGAGAAG
ACCCAGGCCCTGCAGAACACCATGCAGGAGTGGACAGACGTGCGGCAGTCTCAGAGCCTTCCAAGGGTGCCAAG
CTGTGATGAGAGGGCCACCGCAGAGCCCAGGAGGCAGCATCTCCAGAGCTGGCCCTTCCCATCTCCCTCTCCCC
TCTCCCGTTCTTCTCCATCCACCTCCTCTCTACTCTGCCAGTCTCAGCCTTCAAAGCACTTGACATCAGGGAC
CCTGAACCCCTTCCCTGGGAGGTGAGGGCTGTATCAAGGCACCTCCTCTGCCCACTCGGGGCCAGCTGTGATTT
TTATCAGTAATGGCCATGCCCTCCACCCACCTTAGTTAGGAGCTACTTCCAAAAGCATCCTTACGCCTCTTCTGT
TCCTTTAGACCTGACTCTTACCAGATGTTTGGAGGGAAGGGCTGGGGCTCTGAGCCAGATTCCACACCTCACGT
TCAGTCACAGCCCTCAGCTATCTTCCCTCCGGCCACTGGGCTACCTCTCCTTCACTCCAGTCCAGAACAGTCTCAC
CAACCCAGGGAGTCAAGGACCAGCAAACCAAGTGGAATGGAATTTTATTCTCTGTTTCTTGGCAGGAGA
GAAGCAAGGCCACTAAAGAGGAGATGGTGGAGACGAGGCTCAGCAGTGGTCTTGAGGGGTAAAGGACTTAGAT
GCCAGATGAAGAGGGAAGCTGACATCTGCAGGGAACCACTTTGAGGCTGAGGCCATGGCAGGACAGCTGCTG
TGGGGTGCAGAGGCAGAAGATGAAGGACAAAAGGAAGGGAAGGAACTGATGGCCAACCTAGAGCAGCAAGGAGCAGG
GCTTGGAGCTCGGGTGGTGGAGATGACAAGGACACTGTGGGGTCTGGGTCCCCAGAACTCTGGAGCTACAGGCCA
CTTAGGCCCAAGGGCTAGTCTCTTCCCACTCCCTCAGAGGCCCCCGCCAGCCCCACCTTGAAGCAGCATA
CAGGGGAAGGCTTGACCAAGCTGGGCGACCAAGCACATGGGGCAGGAACACATGGTAAGGGGTGGGAATATG
GGAGGGAGTGTGGTGTGGATGGGGTGATGCAGGACTGAGGGGAACCCCTGGGACAGGCAGGCTGGGCAGAGG
CACAGGGCAGTGCAGGGGACTCTGCAGTGGGGTCGGAAGTGAGTTTCTTTCAGTGAGCAGTGCAGTGAAGTC
GGGCACAGAGGTAGCAGACAGATGTGAAGCAGTGGTGAAGGCCATGTAGCAAGTGGGGAAATACATCCAAGGGC
CTGGGAGTTGGGGGTGCCAACGCAATCCTTGGGGGTGCAGGGTGGAGCAGAAAGTGAAGGAGGGACACGTGCA
AGAGTGGTGTGCATGGTGGTGTGACATGAGGACCGTTCTAGGATGGGACAGTGGGTGAGGCAGGACAAGGAGAA
AGCAGGGCAGAATGATGCCTAGAGGACCACATCAGGCATGGCTGACAGCTTGTGCCCATGGGCTGTGGCGTATGT
CAGATCGCAGGGTAGGAACGAGTCTGGCTGGTGGCGCCAGTGTTCCTCAGCTCATCCGCCCTCTGTTGCTC
CCTAGCATTCAGGAGCCATCTTGGACTCTCCTCCCCAGGTTTGAAAGGCCATCAGATTAGCAGGGACGGGGTGT

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FIGURE 3342B

AGGGCATCACCCAAGGTTCTTCTCTTAAACTAAGGGTGGGGGATCTGAATGTTTTTATGTTGACTGTTCTTGAC
TAAATTTTCAAGAGTTTCAGAAGCAACAGGACAGACCAGACGTTTTCATTCTACCCTGGGGCGAACAGAACTTCTT
CCTCCCAAACAATGACTTCCTGCCATGTTTGATGGGGACAGCTACCACTGTCTCTGCCCCATTCCCTTTTCAG
CTCCCATGAGCATGCATAGTTCACCAGACCAATGGCCTAGCCATTCTCTAAGTCCCATCCTGGAAGAAGTTATTT
CTTCAAGAGCTGCACCTCTCCTCCTAGCATTAGTTTAGATCAACTCAAGGAGTATTTATTAATGGCTGCTGTCTC
CAGTTTCTGGGGTTAAGCACTAAGGACACAAGAATCAATCAGACCTTCTCCCTGAACCTAAGATAGCCACAATCA
GAAAAAGGACAAGGACATGAGACAGTGGTGATGGCCATCAGACAGAGACTTCAAATGCTGATGGAGGGCAGAGGA
AGTACTTAGGGAGGTTGGTGTGTCAGAGGCAGGAGTGGGGGATCAGGGAAGGTGGATTCTAGGAAAAGGGAGTGCCT
GAGGTAGGCCCTTAGAAGGGGATGAGTCAGATTTTTACAGAGGAGGAGGGCAGGGCTTGGGTCCAGTGGAGGAAGA
AGGAAGGAGAGGCTTGGAAAGCCTTGTGTCTTGGGAAAAAAGGCCTTTGAGCATATGGGTCCAGCCACTCAGAA
GTGCAGGGGCCATGCCTTGGTGTTCGAATAAGTGAATGGAAGCAGTGGTGGTAGCTACACTGGGCAGAGTTGGCA
GGGTGCTGGTTCACTCTGCCCAGCCCTGAATGTGTGCCTTAAAGGCCCCCTACAAGGGGGCCCCATACGACAGAGC
TTTTAACTGGTGCCTTCCCTGTACCCGCGAGCAGCCACAAGTGGGCCCAGACTATTGCAGCCTCCCATAAACATGT
GAGCATGTTCTGAGTGTGCCATGATGTGAGTGGACCTGGCTGGAATCTTCGGAGAGCGACTGAGGTGTTCAAATC
GAATCTCCAGGAGGCTTCCCTCCAGCCCCCTATTCTGGTAACTACCAGGAGGCTTCCCTTCAGCCCCCTATTCT
GGTAACTACCAAATCCCTCGGGTGCAAGTGTAGGGGTAGAGATGGAAGGATGAGAGGTGAAATTGACCTTTTGA
AAGCAAAGCTCTGGCTCACAGGCCCCAACTACCAGCCGTATCTAGCATATCCCCACCCCTCCACCCACTACCTCC
TCCAACAAAGGAGTCAACTCAGTTGAAAAAAGTGGTCCCTTGGCCTATCCATGGGTCAAAGTCCACCTCTCCTGG
GGGCTTGGAGAGGACTGAGCCTACGGAAAGGGGATACCTTCCCACTCAGCACTGCTTCACACAGGCCCCCTGCCT
GGGGCTCTCCAAGGAGCCTTCTTCACCCACTTCCAGCTCCACTTCTGCAAGGTTAAGTCAAGTGAGAACGATGAG
AAATAGGGAGATGGTGTCTCCTTAAGTCCTTGATCTGCCTGTCTGTGGAATGGGAGGTGGATTAGCTGCGCTGA
GGTCCCATCCACAGCTGGTGTCTCAGCTGCTTGAAGGGGAGACTCCCTCCTCTGTAACCTCTTCTGGGGGATTGG
GGTGGGCAGTACCTATCCCCAGTCCCCTCCTAGCTTGACTTTAGTGGTTTCCAATGTAGAAGTTAACAAAGTATG
CCCCATTCTGTGACAAAAGCACAACCTTCTGAAGTTACTGGAGCATGGGCTCAGCTCATCTCCCTCTGGCCC
CTTCTCCCATGGGGACATCTCGGCCAGCACCCCTATCCCATTTCCAGAGTTCTTCCCTTCCCCATCTGGGCCTTC
ATAAAATGCAGGGGAAGCCAGACTGGTCTCAGGAGCGCTAAAGCCCTTCCGTGGGGGGTCGTCTTCTGGGACTA
GCCCTGCTGTTTAGGACCTGGGACCACAATGGGGTACCTGCCGAGGGGGTCCCCAAGAGATCCAGGCTGTCAATG
GATTTATGGTGGCATGTGTTGTGTATTTGTTGGCTACTTGTGTCTTGAAATCTAGAATTATTTACGCAGAATTG
TCACTGTTTGTGAGGAAGAGAAAATGGGCTAGTGAAGCCAGTCTTGAGTCTTGTCTTGTACCATTTAAAAAT
TGACATTTAATTTTCAAATCACTGTTGGTGCCTAATCACTTAAGTTATTAATTTATTTCTGTTGTATTCTTTTTT
TAAATTGTAACATATTTATCCGGTGGGTGGGACAGGAGTGTGTTCAAGTGGGTCATGTTTTGCTGTGGTGACAC
ATGGTACAGGCTTGGAGCTTGCAGGTCCCTTTCTACTGTGGTGTGGAGCAGGACAATAAAGTCCACTAGAAATG
CACCCCA

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FIGURE 3343

MSGGGDVVCTGWLKSPPEKKLRRYAWKKRWFILRSGRMSGDPDVLEYYKNDHSHKKPLRIINLNFCEQVDAGLTF
NKKELQDSFVFDIKTSERTFYLVAEETEEDMNKWVSICQICGFNQAEESTDSLNRVSSAGHGPRSSPAELSSSSQ
HLLREKSSAPSHSSQPTLFTFEPPVSNHMQPTLSTAPQEYLYLHQCSIRRAENARSASFSGTRASFLMRSDT
AVQKLAQGNGHCVNGISGQVHGIFYSLPKPSRHNTFRDSTYDLPRSLASHGHTKGSLTGSETDNEDVYTFKTPSN
TLCREFGDLVDNMDVPATPLSAYQIPRTFTLDKNHNAMTVATPGDSAIAPPPRPPKPSQAETPRWGSPQQRPP
SENSRVAATIPRRNTLPAMDNSRLHRASSCETYEYPQRGGESAGRSAESMSDGVGSFLPGKMIVGRSDSTNSED
NYVPMNPGSSTLLAMERAGDNSQSVYIPMSPGAHHFDSLGYPSTTLPVHRGPPSRGSEIQPPPVNRNLKPDRKAKP
TPLDLRNNTVIDELPFKSPITKSWSRANHTFNSSSSQYCRPISTQSITSTDSGDSEENYVPMQNPVSASPVPST
NSPAPKKSTGSVDYLALDFQPSSPSPHRKPSTSSVTSDEKVDYVQVDKEKTQALQNTMQEWT DVRQSSEPSKGAK
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FIGURE 3344A

GAAATTTTGAGAAGTGGTGGGATGAAGAAGATCCCTGAAGAGAGGAGTAACTGAGACAAAGGCGAGGCTAGCAAT
AGAGAGACAAGTGAGGGAATTAGACCTTTGGTATCATCATGAAAAGGCCTGGAAGAAACGCTGGTTTATCCTGCG
GAGTGGCCCGATGAGCGGTGACCCAGATGTTCTGGAATACTACAAGAACGATCACTCCAAGAAGCCTCTGCGGAT
CATCAACCTGAACCTTCTGTGAGCAGGTAGATGCAGGCCTGACCTTTAACAAGAAGGAGCTGCAGGATAGTTTGT
GTTTGACATCAAGACCAGTGAACGCACCTTTTACCTGGTGGCTGAGACAGAAGAGGACATGAATAAGTGGGTCCA
GAGCATCTGCCAGATCTGTGGCTTCAATCAGGCTGAGGAGAGCACAGACTCCCTGAGAAATGTTTCTCAGCCGG
TCATGGCCCCCGCTCTTCTCCAGCTGAGCTCAGCAGCTCTAGCCAGCACCTTCTCCGAGAGCGCAAGTCTCAGC
CCCATCACACTCCAGCCAGCCAACTCTGTTACGTTTGAACCCCTGTGTCAAACCACATGCAGCCCACCTTGT
CACCAGCGCACCTCAGGAGTATCTCTACTTGCACCAGTGCATAAGCCGAAGAGCAGAAAATGCAAGGAGTGCCAG
CTTCTCTCAGGGCACCAGAGCCTCTTTTCTCATGAGGAGTGACACAGCTGTACAAAACTTGCCAGGGCAATGG
ACACTGTGTCAACGGGATCAGTGGTCAAGTCCATGGCTTCTATAGCCTTCCCAAGCCGAGCCGGCACAATACAGA
ATTGAGAGACAGTACCTACGACCTCCCCCGCAGCCTGGCCTCCCATGCCCACACCAAGGGCAGCCTCACAGGCTC
CGAGACAGATAATGAGGATGTGTACACCTTCAAGACGCCCAGCAACACCCTGTGCAGGGAGTTCGGGGACCTCCT
GGTAGACAATATGGATGTTCCGGCCACCCACTCTCAGCCTACCAGATCCCTAGGACATTCACTCTGGACAAAAA
CCACAATGCCATGACAGTGGCCACTCCTGGGGACTCAGCCATAGCTCCCCACCCCGCCCCCAAGCCAAGTCA
GGCAGAAACACCTCGATGGGGCAGTCTCAGCAGAGACCGCCAATCAGTGAAAATAGCAGATCTGTGCGTGCCAC
CATCCCCAGACGCAACACCTCCTGCAATGGACAACAGCCGACTTCACCGAGCTTCTTCTGTGAGACCTACGA
GTACCCACAGCGTGGTGGAGAGAGTGCAGGCCGGTCTGCTGAATCCATGAGTGATGGAGTTGGCTCTTTCTGCC
AGGGAAAATGATTGTGGGCCGATCGGACAGCACAATTCTGAAGACAACATATGTGCCCATGAATCCAGGTCTTC
CACCTGTGTGGCCATGGAACGAGCAGGTGATAATCCAGAGCGTCTACATCCCAATGAGCCCAGGGGCCATCA
CTTGACTCACTTGGCTACCCATCAACAACCCTTCTGTGCACCGAGGCCCCAGCAGAGGAAGTGAGATTACGCC
ACCCCTGTCAACCGCAACCTCAAACCTGATCGAAAGCAAAGCCAACACCACTTGACCTGAGGAACAACACCGT
CATCGATGAACCTCCCTTCAAGTCACTATACCAAGTCTTGGTCTAGGGCCAACCACACCTTCAACTCCAGCTC
CTCCAGTACTGCCGCCCATCTCCACCCAGAGCATCACCAGCACAGACTCAGGAGACAGCGAAGAGAACTATGT
CCCTATGCAAAACCCAGTGTCTGCATCTCCCGTTCAGTGGCACGAACAGTCTGCCCCCTAAGAAGAGCACCGG
CAGCGTTGATTATCTGGCCCTGGACTTCCAGCCGAGCTCCCCAAGCCCCACCGCAAGCCATCTACTTCATCCGT
CACCTCTGATGAGAAGGTGGACTACGTTCAGGTGGACAAGGAGAAGACCCAGGCCCTGCAGAACACCATGCAGGA
GTGGACAGACGTGCGGCAGTCTCAGAGCCTTCCAAGGGTGCCAAGCTGTGATGAGAGGGCCACCGCAGAGCCCA
GGAGGCAGCATCTCCAGAGCTGGCCCTTCCCATCTCCCTCTCCCTCTCCCGTCTTCTCTCCATCCACCTCCT
CTCTACTCTGCCAGTCTCAGCCTTCAAAGCACTTGACATCAGGGACCCCTGAACCTTCCCTGGGAGGTGAGGGC
CTGATCAAGGCACCTCCTCTGCCACTCGGGGCCAGCTGTGATTTTTATCAGTAATGGCCATGCCTCCACCCAC
CTTAGTTAGGAGCTACTTCCAAAAGCATCCTTCAGCCTCTTCTGTCTTTAGACCTGACTCTCTACCAGATGT
TTGGAGGGAAGGGCTGGGGCTCTGAGCCAGATTCCACACCTCACGTTCACTACAGCCCTCAGCTATCTTCCCTC
CGGCCACTGGGCTACCTCTCCTTCACTCCAGAACAGTCTCACCAACCCAGGGAGTCAAGGACCAGCAAACC
AAAGTGGATAATGGACTTTTTTATTCTGTTTTTCTTGGCAGGAGAGAAGCAAGGCCACTAAAAGAGGAGATGGT
GGAGACGGAGGCTCAGCAGTGGTCTTGAGGGGTAAAGGACTTAGATGCCAGATGAAGAGGGAAAGCTGACATCT
GCAGGGAACCCACTTTGAGGCTGAGGCCATGGCAGGACAGCTGCTGTGGGGTGACAGGCAGAAAGATGAAGGACA
AAAGGAAGGGAAAACCTGATGGCCAACCTAGAGCAGCAAGGAGCAGGGCTTGAGCTCGGGTGGTGGAGATGACAA
GGACACTGTGGGGTCTGGGTCCCCAGAACTCTGGAGCTACAGGCCACTCTAGGCCCAAGGGCTAGTCTCTTCCC
CAGTCCCCCTCAGAGGCCCCCGCCAGCCCCACCTTGAAAGCAGCATACAGGGGAAGGCTTGACCAAGCTGGGCGA
CCAAGCACATGGGGCAGGAACACATGGTAAAGGGTGGGGAATATGGGAGGGAGTGTGGTGTGGATGGGGGTGAT
GCAGGGACTGAGGGGAACCTGGGACAGGCACAGGCTGGGCAGAGGCACAGGGCAGTGACAGGACAGATGTGAAG
GGGTGCGGAAGTGAGTTTCTTTGAGTGAGCAGTGACGTGGAAGTCGGGCACAGAGGTAGCAGACAGATGTGAAG
CAGTGGTGAAGGCCATGTAGCAAGTGGGGAATACATCCAAAGGGCTGGGAGTTGGGGGTGCCCAACGCAATC
CTTGGGGGTGCAGGGTGGAGCAGAAAGTGAAGGAGGACACGTGCAAGAGTGGTGTGCATGGTGGTGTGACATGA
GGACCGTTCCTAGGATGGGACAGTGGGTGAGGCAGGACAAGGAGAAAGCAGGGCAGAAATGATGCCTAGAGGACCA
CATCAGGCATGGCTGACAGCTTGTGCCATGGGCTGTGGGTATGTGATCGCAGGGTAGGAACGAGTCTGGCC
TGGTGCCGGCCAGTGTTCCTCAGCTCATCGCCCTCTGTTGCTCCCTAGCATTCAGGAGCCATCTTGGACTC

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FIGURE 3344B

TCCTCCCCAGGTTTGAAAGGCCATCAGATTAGCAGGGACGGGGTGTAGGGCATCACCCAAGGTTCTTCTCTTAA
ACTAAGGGTGGGGGATCTGAATGTTTTATGTTGACTGTTCTTGACTAAATTTTCAAGAGTTTCAGAAGCAACAG
GACAGACCAGACGTTTCATTCTACCCCTGGGGCGAACAGAACTTCTTCCTCCCAAACAATGACTTCCTGCCATGTT
TGATGGGGACAGCTACCACTGTCTCTGCCCCCATTCCTTTTCAGCTCCCATGAGCATGCATAGTTCCACCAGAC
CAATGGCCTAGCCATTCTCTAAGTCCCATCCTGGAAGAAGTTATTTCTTCAAGAGCTGCACCTCTCCTCCTAGCA
TTAGTTTAGATCAACTCAAGGAGTATTTATTAATGGCTGCTGTCTCCAGTTTCTGGGGTTAAGCACTAAGGACAC
AAGAATCAATCAGACCTTCTCCCTGAACCTAAGATAGCCACAATCAGAAAAAGGACAAGGACATGAGACAGTGGT
GATGGCCATCAGACAGAGACTTCAAATGCTGATGGAGGGCAGAGGAAGTACTTAGGGAGGTTGGTGTGAGAGGCA
GGAGTGGGGGATCAGGGAAGGTGGATTCTAGGAAAAGGGAGTGCCTGAGGTAGGCCTTAGAAGGGGATGAGTCAG
ATTTTACAGAGGAGGAGGGCAGGGCTTGGGTCCAGTGAGGAAGAAGGAAGGAGAGGCTTGGAAGCCTTGTTGT
CTTGGGAAAAAAGGCCTTTGAGCATATGGGTCCAGCCACTCAGAAGTGCAGGGGCCATGCCTTGGTGTTCGAAT
AAGTGAATGGAAGCAGTGGTGGTAGCTACACTGGGCAGAGTTGGCAGGGTGCTGGTTCACTCTGCCAGCCCTGA
ATGTGTGCCTTAAAGGCCCTTACAAGGGGCCCATACGACAGAGCTTTAACTGGTGCCTTCCCTGTACCCGCA
GCAGCCACAAGTGGGCCAGACTATTGCAGCTCCATAAATGTGAGCATGTTCTGAGTGTGCCATGATGTGA
GTGGACCTGGCTGGAACTCTCGGAGAGCGACTGAGGTGTCAAATCGAATCTCCCAGGAGGCTTCCCTCCAGCCC
CCTATTCTGGTAACTACCAGGAGGCTTCCCTCCAGCCCCCTATTCTGGTAACTACCAAAATCCCTCGGGTGCAAG
TGTAGGGGTAGAGATGGAAGGATGAGAGGTGAAATTGACCTTTTGAAGCAAAGCTCTGGCTCACAGGCCCAAA
CTACCAGCCGTATCTAGCATATCCCCACCCTCCACCCACTACCTCCTCCAACAAGGAGTCAACTCAGTTGAAAA
AACTGGTCTTTTGGCCTATCCATGGGTCAAAGTCCACCTCTCCTGGGGGCTTGGAGAGGACTGAGCCTACGGAAA
GGGGATACCTTCCCACTCAGCACTGCTTCACACAGGGCCCCCTGCCTGGGGCTCTCCAAGGAGCCTTCTTCACCCA
CTTCCAGCTCCACTTCTGCAAGGTTAAGTCAAGTGAGAACGATGAGAAATAGGGAGATGGTGTCTCCTTAAGTCC
TTGATCTGCCTGTCTGTGGAATGGGAGGTTGGATTAGCTGCGCTGAGGTCCCATCCACAGCTGGTGTCTAGCTGC
TTGAAGGGGAGACTCCCTCCTCTGTAACCTCTTTCTGGGGGATTGGGGTGGGCAGTACCTATCCCCAGTCCCTC
CTAGCTTGACTTTAGTGGTTTCCAATGTAGAAGTTAACAAAGTATGCCCCATTCTGTGACAAAAGCACAAACCAT
TCTGAAGTTACTGGAGCATGGGCTCAGCTCATCTCCTCTGGCCCCCTTCTCCCATGGGGACATCTCGGCCCAGC
ACCCCTATCCATTTCCAGAGTTCTTCCCTTCCCCATCTGGGCCCTTCATAAAATGCAGGGGAAGCCAGACTGGTCT
CAGGAGCGCTAAAGCCCTTCCGTGGGGGGTCTGCTTTCTGGGACTAGCCCTGCTGTTTAGGACCTGGGACCACAA
TGGGGTACCTGCCGAGGGGGTCCCCAAGAGATCCAGGCTGTCATGTGATTTATGGTGGCATGTGTTGTGTATTG
TTGGCTACTTGTGTCTTGAAATCTAGAATTATTTACGCAGAATTGTCACTGTTTGTGAGGAAGAGAAAATGGGC
TAGTGGAAGCCCAGTCTTGAGTTCTTGTCTTGTACCATTTAAATTTGACATTTAATTTCAAATCACTGTTGGT
GCCTAATCACTTAAGTTATTAATTTATTTCTGTTGTATTCTTTTTTTAAATTGTAACATATTTATCCGGTGGGTG
GGACAGGAGTGTGTTCAAGTGGGTGATGTTTTGCTGTGGTGACACATGGTACAGGCTTGGAGCTTGACAGGTCCC
TTTCTACTGTGGTGTGGAGCAGGACAATAAAGTCCACTAGAAATGCACCCCA

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FIGURE 3345

MSGDPDVLEYYKNDHKKPLRIINLNFCEQVDAGLTFNKKELQDSFVFDIKTSERTFYLVAEETEDMNKWWQSIC
 QICGFNQAEESTDSLNRNVSSAGHGPRSSPAELSSSSQHLLRERKSSAPSHSSQPTLFTFEPVSNHMQPTLSTSA
 PQEYLYLHQCIARRAENARSASFSGTRASFMRSDTAVQKLAQGNHCVNGISGQVHGIFYSLPKPSRHNTTEFRD
 STYDLPRSLASHGHTKGSLTGSETDNEDVYTFKTPSNTLCREFGDLLVDNMDVPATPLSAYQIPRTFTLDKNHNA
 MTVATPGDSAIAPPPRPPKPSQAETPRWGSPPQQRPPISENSRSVAATIPRRNTLPAMDNSRLHRASSCETIEYPQ
 RGGESAGRSAESMSDGVGSFLPGKMIVGRSDSTNSEDNYPMPNPGSSTLLAMERAGDNSQSVYIPMSPGAHHFDS
 LGYPSTTLPVHRGPPSRGSEIQPPPVRNLKPDRAKAPTPLDLRNNTVIDELPFKSPITKSWSRANHTFNSSSSQY
 CRPISTQSITSDSGDSEENYVPMQNPVSASPVPSGTNSPAPKKSTGSDYLALDFQPSSPSPHRKPSTSSVTSD
 EKVDYVQVDKEKTQALQNTMQEWTQVRQSSEPSKGAKL

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FIGURE 3346

TTAACCATTCTAACTTTGCCTTGGGATATTGAAAATTCTGAATCAGTGAGGTATCTAAATAATTTATATTTTCA
AAAAATAATGTTTATTTTATAATTCTGAGTGTAACACTATCAGAAAAGTAATCCTCATGCTCACTAAACAAAC
CTACTCTAAGACACTCAACAACCAGAACAGTTTTATTATTGAGTTGTGTACAAAATCTTGACTGTCCAGATGAA
ATAGTTTTTTCAGCCTGCAGTGTGTTAGTGATATATCTCAAGGAGATGAACCAATAAAGTACAGACTTTGTGGTCT
GAAGCTCTGTTGTGAAAAAATAAGCTAAACCAATTACACTGACAGTATAATTTGATTCAAGTGCAGCTCCAGTT
CAATAAAAACTAATGTTTAAAAATTAACCTTTGTTTTGTATTTGGTTCAACTCCTTGCTAGTTCTCTCTCTATAT
AATTTATAAAAACTGCATGTTGCTAATCTCATGATCCTGTGCATGTGGACTACTCTGCCTTTAACTTTTTTACAA
AAACATGTTTGTTCATAGATTAAATAAAAGTATGTTTTCAACTTAATGTCTAATGTTTTCTGACAATTGTAAGAA
TAATTTTGAAATGGAAATGCTGCTGTTTAGTTTCCACAGTGCCTACACAACCTGATAATCCATTTTCTCACCCTG
ACAACTCAAAAGGATGAGCAAGTCTGTTCCAGCATTTCTCCAAGATGAGAGTGATGACAGAGAAACAGATACAG
CATCAGAAAGCAGTTACCAGCTCAGCAGACACAAGAAGAGCCCCGAGCTCTTTAACCAATCTTAGCAGCTCCTCTG
GCATGACGTCCTTGTCTTCTGTGAGTGGCAGTGTGATGAGTGTATATAGTGGAGACTTTGGCAATCTGGAAGTTA
AAGGAAATATTAGTTTGCATTGAATATGTGGAGTCACTGAAGGAGTTGCATGTTTTTGTGGCCAGTGTAAAG
ACTTAGCAGCAGCGGATGTAAAAAACAGCGTTCAGACCCATATGTAAAGGCCTATTTGCTACCAGACAAAGGCA
AAATGGGCAAGAAGAAAACACTCGTAGTGAAGAAAACCTTGAATCCTGTGTATAACGAAATACTGCGGTATAAAA
TTGAAAAACAAATCTTAAAGACACAGAAATTGAACCTGTCCATTTGGCATCGGGATACATTTAAGCGCAATAGTT
TCCTAGGGGAGGTGGAATTTGATTGGAAACATGGGACTGGGATAACAAACAGAAATAACAATTGAGATGGTACC
CTCTGAAGCGGAAGACAGCACCAGTTGCCCTTGAAGCAGAAAACAGAGGTGAAATGAAACTAGCTCTCCAGTATG
TCCCAGAGCCAGTCCCTGGTAAAAAGCTTCCTACAACCTGGAGAAGTGCACATCTGGGTGAAGGAATGCCTTGATC
TACCACTGCTAAGGGGAAGTCATCTAAATCTTTTGTAAATGTACCATCCTTCCAGATACAAGTAGGAAAAGTC
GCCAGAAGACAAGAGCTGTAGGGAAAACCACCAACCTATCTTCAACCACACTATGGTGTATGATGGGTTTCAGGC
CTGAAGATCTGATGGAAGCCTGTGTAGAGCTTACTGTCTGGGACCATTACAAATTAACCAACCAATTTTTGGGAG
GTCTTCGTATTGGCTTTTGAACAGGTAAAAGTTATGGGACTGAAGTGGACTGGATGGACTCTACTTCAGAGGAAG
TTGCTCTCTGGGAGAAGATGGTAAACTCCCCAATACTTGGATTGAAGCAACACTGCCTCTCAGAAATGCTTTTGA
TTGCCAAGATTTCCAAATGAGCCCAAATTCCTACTGGCTCCTCCACTGAAAACTACTAAACCGGTGGAATCTGATC
TTGAAAATCTGAGTAGGTGGACAAATATCCTCACTTTCTATCTATTGCACCTAAGGAATACTACACAGCATGTAA
AAGTCAATCTGCATGTGCTTCTTTGATTACAAGGCCCAAGGGATTAAATATAACAAATGTGTAATTTGTGACT
CTAATATTAATAAGATATTTGAACAAGCTAGGAAAATTGAATTTCTGCTGCTGCTTCAAAGAAAAAGCTGCCCC
AGAGCATTAAACATGGGGTATTGTTAAGAAGCAAAATGTTCTTGTGTTGCCATCATGTGTTTCACACCACAATTCT
GTGCCACAGTTAAGAGGGTCTGGTACCCTTGCAGGACCTTTGTAGGTTGTGGGAAAAAGTCGCAGAAAGATACTC
AAAGTGGAGCAGGGAATGGAGACAGACATCAGTGATGATAAAAAAAAAAAGGACCTTAAGAACTATTTACTCT
GTAATCTCTAATAAAATATGGAATTCATATTAGGGCAATGAGACTGAACTACTGGTGTGTTTTCTGCCTTGAGA
AAACAAACAGTTAAACAAGCCTCAAATGTATTTTAGTGCCACCCACTGGCCATAGGTACAATTCAGTTGTTGGC
TTGTTTTGACTTAATTTCTAAATAGGTCTCAAGCCTGTATTTTATGAGTTTATTTTTTAAACCCCTGCATATA
TATGATTGTTTTTTCTTATAACTTTACTATATGAAAGCAGCATAAGAGTAGTCACAAACATGTTTTGCAACAAAGT
TTTAATTAGAATGTAAGTTGCTCAGTTATACTGTTCTTCTTATGTATGTAAATTTTCGTATTTTGTAAAAACCC
TTAGAATAAATTATCATTTGATTTAAATTGT

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FIGURE 3347

MSKSVPAFLQDESDDRETDASESSYQLSRHKKSPSSLTNLSSSSGMTSLSSVSGSVMSVYSGDFGNLEVKGNIQ
FAIEYVESLKELHVFVAQCKDLAAADVKKQRS DPYVKAYLLPDKGKMGKKTLVVKKTLNPFVYNEILRYKIEKQI
LKTQKLNL SIWHRDTFKRNSFLGEVELDLETWDWDNKQNKQLRWYPLKRKTAPVALEAENRGEMKLALQYVPEPV
PGKKLPTTG EVHIWVKECLDLPLLRGSHLNSFVKCTILPDTSRKSQKTRAVGKTTNP IFNHTMVYDGF RPEDLM
EACVELTVWDHYKL TNQFLGGLRIGFGTGKSYGTEVDWMDSTSEEVALWEKMN SPNTWIEATLPLRM LLI AKIS
K

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FIGURE 3348

GGCAGGCATGGGAGCCGCGCGCTCTCTCCCGGCGCCACACCTGTCTGAGCGGGCGCAGCGAGCCGCGGCCCGGGC
GGGCTGCTCGGCGCGGAACAGTGCTCGGCATGGCAGGGATTCCAGGGCTCCTCTTCCTTCTCTTTCTGCTCT
GTGCTGTTGGGCAAGTGAGCCCTTACAGTGCCCCCTGGAACCCACTTGGCCTGCATACCGCCTCCCTGTCGCTCT
TGCCCCAGTCTACCTCAATTTAGCCAAGCCAGACTTTGGAGCCGAAGCCAAATTAGAAGTATCTTCTTCATGTG
GACCCAGTGTCATAAGGGAACCTCCACTGCCCACCTTACGAAGAGGCCAAGCAATATCTGTCTTATGAAACGCTCT
ATGCCAATGGCAGCCGCACAGAGACGCAGGTGGGCATCTACATCCTCAGCAGTAGTGGAGATGGGGCCCAACACC
GAGACTCAGGGTCTTCAGGAAAGTCTCGAAGGAAGCGGCAGATTTATGGCTATGACAGCAGGTTTCAGCATTTTTG
GGAAGGACTTCCTGCTCAACTACCTTTTCTCAACATCAGTGAAGTTATCCACGGGCTGCACCGGCACCTTGGTGG
CAGAGAAGCATGTCTCACAGCTGCCCACCTGCATACAGATGGAAAAACCTATGTGAAAGGAACCCAGAAGCTTC
GAGTGGGCTTCCTAAAGCCCAAGTTTAAAGATGGTGGTTCGAGGGGCCAACGACTCCACTTCAGCCATGCCCCGAGC
AGATGAAATTTAGTGGATCCGGGTGAAACGCACCCATGTGCCCAAGGGTTGGATCAAGGGCAATGCCAATGACA
TCGGCATGGATTATGATTATGCCCTCCTGGAACCTAAAAAGCCCCACAAGAGAAAATTTATGAAGATTGGGGTGA
GCCCTCCTGCTAAGCAGCTGCCAGGGGGCAGAATTCACCTTCTCTGGTTATGACAATGACCGACCAGGCAATTTGG
TGATCGCTTCTGTGACGTCAAAGACGAGACCTATGACTTGCTCTACCAGCAATGCGATGCCAGCCAGGGGCCA
GCGGGTCTGGGGTCTATGTGAGGATGTGGAAGAGACAGCAGCAGAAGTGGGAGCGAAAAATTATTGGCATTTTTT
CAGGGCACCAGTGGGTGGACATGAATGGTTCCCCACAGGATTTCAACGTGGCTGTCAGAATCACTCCTCTCAAAT
ATGCCCAGATTTGCTATTGGATTAAAGGAACTACCTGGATTGTAGGGAGGGGTGACACAGTGTTCCTCCTGGC
AGCAATTAAGGGTCTTCATGTTCTTATTTTAGGAGAGGCCAAATTGTTTTTTGTCAATTGGCGTGCACACGTGTGT
GT
CTATTTGAAAACCTGGTTTGTGTATCATATCATATATCATTTAAGCAGTTTGAAGGCATACCTTTGCATAGAAATA
AAAAAATACTGATTGGGGCAATGAGGAATATTTGACAATTAAGTTAATCTTCACGTTTTTGCAAACCTTTGATT
TTTATTTTCATCTGAACCTGTTTCAAAGATTTATATTAAATATTTGGCATAACAAGAGATATGA

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FIGURE 3349

TGCTGGCCGGGCGAGAGGCTGGCGGCTGGGCTCTCGCGCCCTCCCTGCAGGGCTCAGGCTCTCCCCCTCCTGTC
TTCTCCGCGCTGTTCTCGTCATGGCGGCCCTCAGCAAGTCCATCCCTCATAACTGCTATGAGATCGGCCACACT
TGGCACCCCTTCCTGCCGGGTCTCCTTCCTGCAGATCACCGGGGGCGCCCTGGAGGAGTCCCTGAAGATCTATGCT
CCTCTGTACTTGATTGCAGCAATTCTCCGGAACGGAATTAGACTATTATTTACACAACTACTCCCTGAGATC
CTACAATCCGCTTCATTTCTAACTGCTAATGGGGCCTTGTATATGGCTTTCTTTTGCATTTTAAAGGAAGATACTT
GGAAAAATCTACTCATGGACTCCTGGCTTTGGTGCCGCTCTGCCAGCATCTTATGTGGCCATTCTCATTGAAAGA
AAAAGCAGGAGAGGGCTGCTCACAATTTATATGGCCAACCTGGCCACAGAAACACTATTGAGATGGGTGTAGCA
AGAGGAACCATCACAAACATTAAGAAATGGAGAAGTCTTTTGTGTTTGCATCACAGCTGCCATGTACATGTTCTTT
TTCAGGTGCAAGGATGGCTTGAAAGGATTTACATTTTCTGCACTTAGGTTTATTGTAGGGAAGGAAGAAATCCC
ACACATTTCTTTTACCAGAGGCAGCATATGCAAAAGTGAACAAAAGAGAGAGCAACATGAGGAAAAACCCGGA
AGAATGAATATGATTGGTCTAGTCAGGAAATTTGTGGATTCAATATGCAACATGGACCAAGGCATAGATGTTGC
AAACATTATGAAGATAATTGCATCTCTTATTGCATTAAAGGTTTTCATCAGAATGTTTAGCGTGGGGTACTTGATC
CAGTGCTGCCCTCCGAATCCCTTCTGCATTTAGGCATCTGTTTACACAGCCATCTCGGCTACTTTCTCTCTTCTAC
AATAAAGAAAACCTCCAGCTTGGAGCTTTTCTTGGCTCTTTTGTAGTATATACAAGGGTACTAGTTGCTTCCCTG
CGCTGGATCAGAACTTAGATGATGAACATACATGCTATTATAGCTGGATTTTGGCAGGTATATCAATGATGTTT
TATAAAGCACAACAATTTCCATGTATTTAGCGTCCAAATTTGGTAGAGACAATGTATTTCAAAGGCATTGAAGCA
GGGAAGGTTCCCTATTTTCTCATGCAGATACTATCATCTATTCCATCTCTACAGCAATTTGCTTCCAGGCAGCT
GTCATGGAAGTTCAGACTTTGAGACCATCTTACTGGAAGTTCCTTTTAAGACTCACCAGGGCAAATTTGCTGTC
ATGAACCGAAAAGTCTTGATGTTTTTGGTACTGGTGCACTAAACACTTTCAGGATTTTCATCCCCAGGTTGGAT
CCAAGATACACAACCTGTAACACCAGAGTTGCCACAGAGTTTCTGAAGATGACTGTAACCTTATTAATGTGACT
AAATGTTTCTCTTGAAGAGTTAATTATGTTGAACACAAAGGAGGGGGCCCAAGCTCGAACTTCAGTGTTATTTT
AGTTAGAGATACTCTTTTCATTTGTTTTGTTTTCTTATGAATCAGAAATTCAGAAGCTTTTATAGGAAGATGTTG
CTTAATAATTAAGCTTCTCCATAGCCAGAATAAGATTCTGGATCACTGTAGTGACTGACATTATATATTATTGA
TCAAATTATGTCCACAAGCAATATTATATAATCTACGTAGAAGTGAATAACAAACAAGAGTACACTTAAATTA
CTTTAAAGATGTCTTTAGTTCAATCAATATAATTTCTGATTAAATTAGGATTATTTCTACATTTTAGGATTT
ACAAAGGATCACGGGTACATGGATTTGGTCTATATATTTTAAAGTTTTGAATTGGTATCTGTAGTAGTGGA
TGTTATAGATTTGAAGTAACTCTCCACGGACAGTGCTGCTTTCGTGTAGAGCAATTTAATTGGAGAAGTGGCCAT
TCTTACTTCAGGGATGCAAGATGGGTCTCATACCATTTGGATAAATGTCGTGGTATCCATGCTTTTTTTCAACT
AATAACATCATCTCTCTTCATGACCAGTTAATTGGGCTATTTGGCAGCCAGTGAACCTATGTACTAATGGCAAG
TTAGGGGCAAATGGAAATGGACACATCCGATAAAGTTGAAATGTATGTTTTAATCTTTACAGAAGTATTACACT
TGAATATTTAAAAACAAAACCTTTTAACTTCCCTATAGGTTTATGATGTTTGTGTTTTCAATTTATATGGACATAATCC
TTCATAGCTCAGTTTATATGCCATTGTTGTATTAGAAGGGATCAAAATCCTATGGAACAAAGTAGTCTTGGCAAG
TTGGCAGTTTGTGTCCTCTCAGCTGTTTAACTTATGTAATGGATGTTTTGCACCTGAAAACACTATAAAAAATCCA
GTGGTTGTTTTAAAAGTCCATTTGTCACTAATTCATTTCAGGTTCTCCAACCTTCTTCTGAATATCATTGTGAC
CATTTTTACTGTTAGAATAAAGAGGTGACACCATAAAGTCTGCTGATAATGAGAGTAGTTTCAGGACAGCTGTGA
TTGAAATATGGTCGCTATTTACAGTTTTTTCAGGGAAAAGTTATACTTTTCTATGTTAATAAAGAGCTGAAGTGGT
CTACAGTTAATGTGACATGTAGGGATGATGATATTTTAAATACATTTTGTGCTAAAAAGTTTTTAGGCCAGT
GCAAATTATGCAGTAGAATTTGTGTTGCAAAAGGAATTATAACCCATACTTTAAAAATGCTTAATCCCTCATATT
CAATTTTCATCAAGCCTTGTATACTTCTGCTTAAATGTAATTCATCCTTGGTTGTTATGGCAAACAGAAACCCAA
CAAAAAGACAGACTCTGGTACTATGGTAACAGAGCCACTTTATCATTGGTCAAAATTTGGCATTATGATTAGCT
TTGTAGAAGTACCTGTTTATTTGGCAATGCTGTTAAAGGATCATTTTCGGTTTCAGACTTCAAAGTTGATTATA
AATTTAATCTTAACTTTTTATTCACCTGGAATCAAACGATGGTTGGTACTGTGTTTACTGTTTAAATGAAGTAC
TAAAGCCCTGAGAAGTGCACCTCATTTTCTTTATCCAGAAATGTGCTTATATATTTTCTGTCAGGTTTAAAAA
GATGTTTTAATTCATAAATTATTGTTTTTCATTGACATTAAAGACTGTGATATTG

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FIGURE 3350

TTAGCTTGTTGGGGACGGTAACCGGGACCCAGTGTCTGCTCCTGTCACCTTCGCCTCCTAATCCCTAGCCACTAT
GCGTGAATGCGTCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGTCTGCTGGGAGCTCTACTGCCT
GGAACATGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCCTTCAACAC
CTTCAGTGAGACGGGTGCTGGCAAGCATGTGCCCCGGGCTGTGTTTGTAGACTTGGAAACCCATGGTCATTGATGA
AGTTTGCACCTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAAGATGCTGCCAATAA
CTATGCCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGAATTCGCAAGCTGGCTAA
CCAGTGCACTGGTTTTTCAGGGCTTCTTGGTTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTACCTCCCT
GCTCATAGAACGTCTCTTAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCAATTAÇCCAGCGCCCCAGGT
TTCCACAGCTGTAGTTGAGCCCTACAACCTCCATCCTCACCACCCACACCACCTGGAGCACTCTGATTGTGCCTT
CATGGTAGACAATGAGGCCATCTGTGACATCTGTTGTAGAAACCTCAATATCGAGCGCCGTGCATGCTGAGCAAC
ACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAG

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FIGURE 3351

MRECVSIHVGQAGVQIGNVCWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFSETGAGKHVPRAVFVDLEPMVID
EVCTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIKLANQCTGFQGLVFHSGGGTSGGFTS
LLIERLLVDYGKSKLEFSNYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMDNEAICDICRNLNIERPTYTN
LNHLISQIVSSITASLRFDGALNVDLTEFQTNLVPYSHIHFLATYAPVISAEKAYHEQLSVAEITNASFEPANQ
MVKCDPRHGKYMCCLLCHGDVVPKDANAAIATIKTKRSIQFVDWCPTGFKVGINYQSPTVVPGGDLAMVQSAC

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FIGURE 3352

GGGACGGTAACCGGGACCCAGTGTCTGCTCCTGTACCTTCGCCTCCTAATCCCTAGCCACTATGCGTGAATGCG
TCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGTCTGCTGGGAGCTCTACTGCCTGGAACATGGCA
TCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTGTGTTTGTAGACTTGGAACCC
ATGGTCATTGATGAAGTTTGGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAA
GATGCTGCCAATAACTATGCCCCAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTTGGACCGAATT
CGCAAGCTGGCTAACCAGTGCCTGGTTTTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAAGTGGTTCT
GGGTTACCTCCCTGCTCATAGAACGTCTCTTAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCAATTAC
CCAGCGCCCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAATCCATCCTCACCACCCACACCACCTGGAGCAC
TCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTGTGACATCTGTTGTAGAAACCTCAATATCGAGCGCCCCA
ACCTACACTAACCTTAACCACCTTATTAGCCAGATTGTGTCTCTATCACTGCTTCCCTGTCATTTCTGCTGAGA
AAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACCAATGCTTCCTTTGAGCCAGCCAACCAGATGGTGAAAT
GTGACCTCGCCATGGTAAATACATGGCTTGCTGCCTATTGTGCCATGGTGATGTGGTTCCTCAAAGATGCCAATG
CTGCCATTGCCACCATCAAGACCAAGCGTAGCATCCAGTTTGTAGATTGGTGGCCCACTGGCTTCAAGGTTGGCA
TCAACTACAGTCTCCCACTGTGGTGCCTGGTGGAGACCTGGCCAAGGCGAGTTTTTCAGAGGCCCGTGAAGACAT
GGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAAGAGAGGA
ATACTAATCCATTCTTTTGGCCCTGCAGCATGTCGTCTCCAGAATTTTCAGCTTCAGCTTAGCTGACAGACAT
TAAAGCTTTCTGGTTAGATTTTCATTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATGTTTTTCCATCATGT
CTCAAAGTACAGT

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FIGURE 3353

CACTGTTGCCTATCAGAAGTCAATTCAAACGACCTGCCCCAGAGAGACAAAAGATACAGATATTGTGGATGAAG
CATCTATTACTTCAAGGCCAATATCTTCTTCAAAAACCTATGAAATTAAGAATGAAGCTGATAGGACCTTGATAAT
ATATAATGATATATATAACTCTCTACATTTCTGAATGTCTGAAGAACTCCAAAAGTGCAATCCCCCTGGAAAGC
CTGGTTTTCTACTTAACGCAATTTATGCCAAACCTGCAAACAAACAGGAAGATGAAGTGATGAGAGCCTATTTAC
AACAGCTAAGGCAAGAGACTGGACTGAGACTTTGTGAGAAAGTTTTCGACCCTCAGAATGATAAACCAGCAAGT
GGTGGACTTGCTTTGTGAAGAGACAGTTCATGAATAAGAGTCTTTCAGGACCTGGGCAGTGAAGGGAGCCCCGGGC
AGCCACCGTCTC

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FIGURE 3354

MIYITLYISECLKKLQKCNSPGKPGFLLNAIYAKPANKQEDEVMRAYLQQLRQETGLRLCEKVFDQNDKPSKWW
TCFVKRQFMNKSLSGPGQ

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FIGURE 3355A

AGGGGCACTATGGCAGACAAAGTTAGGAGGCAGAGGCCGAGGAGGCGAGTCTGTTGGGCCTTGGTGGCTGTGCTC
TTGGCAGACCTGTTGGCACTGAGTGATACACTGGCAGTGATGTCTGTGGACCTGGGCAGTGAGTCCATGAAGGTG
GCCATTGTCAAACCTGGAGTGCCCATGGAAATTGTCTTGAATAAGGAATCTCGGAGGAAAACACCGGTGATCGTG
ACCTTGAAAGAAAATGAAAGATTCTTTGGAGACAGTGACGAAGCATGGCGATTAAGAATCCAAAGGCTACGCTA
CGTTACTTCCAGCACCTCCTGGGGAAGCAGGCAGATAACCCCCATGTAGCTCTTTACCAGGCCCGCTTCCCGGAG
CACGAGCTGACTTTTGACCCACAGAGGCAGACTGTGCACTTTCAGATCAGCTCGCAGCTGCAGTTCTCACCTGAG
GAAGTGTGGGCATGGTTCTCAATTATTCTCGTTCTCTAGCTGAAGATTTTGCAGAGCAGCCCATCAAGGATGCA
GTGATCACCGTGCCAGTCTTCTTCAACCAGGCCGAGCGCCGAGCTGTGCTGCAGGCTGCTCGTATGGCTGGCCTC
AAAGTGCTGCAGCTCATCAATGACAACACCGCCACTGCCCTCAGCTATGGTGTCTTCCGCCGAAAGATATTAAC
ACCACTGCCCAGAATATCATGTTCTATGACATGGGCTCAGGCAGCACCGTATGCACCATTGTGACCTACCAGATG
GTGAAGACTAAGGAAGCTGGGATGCAGCCACAGCTGCAGATCCGGGGAGTAGGATTTGACCGTACCCTGGGGGGC
CTGGAGATGGAGCTCCGGCTTCGAGAACGCTGGCTGGGCTTTTCAATGAGCAGCGCAAGGGTCAGAGAGCAAAG
GATGTGCGGGAGAACCCGCTGCCATGGCCAAGCTGCTGCGTGAGGCTAATCGGCTCAAAACCGTCTCAGTGCC
AACGCTGACCACATGGCACAGATTGAAGGCCTGATGGATGATGTGGACTTCAAGGCAAAAGTGACTCGTGTGGAA
TTTGAGGAGTTGTGTGCAGACTTGTGTTGAGCGGGTGCTGGGCCTGTACAGCAGGCCCTCCAGAGTGCCGAAATG
AGTCTGXXXXXXXXXXXXXGTGATCCTGGTGGGTGGGCCCACTCCGGGTCCCCAGAATTCAAGAAGGTGCTG
CTGAAGXXXXXXXXXXGGAGGAGCTGGGGAAGAACATCAATGCAGATGAAGCAGCCGCATGGGGGCAGTGTAC
CAGGCAGCTGCGCTCAGCAAAGCCTTTAAAGTGAAGCCATTGTGCTCCGAGATGCAGTGGTCTACCCCATCCTG
GTGGAGTTCACGAGGGAGGTGGAGGAGGAGCCTGGGATTCACAGCCTGAAGCACAATAAACGGGTACTCTTCTCT
CGGATGGGGCCCTACCCTCAACGCAAAGTCATCACCTTTAACCGCTACAGCCATGATTTCAACTTCCACATCAAC
TACGGCGACCTGGGCTTCCCTGGGGCTGAAGATCTTCGGGTATTTGGCTCCCAGAATCTGACCACAGTGAAGCTA
AAAGGGGTGGGTGACAGCTTCAAGAAGTATCCTGACTACGAGTCCAAGGGCATCAAGGCTCACTTCAACCTGGAT
GAGAGTGGCGTGCTCAGTCTAGACAGGGTGGAGTCTGTATTTGAGACACTGGTAGAGGACAGCGCAGAAGAGGAA
TCTACTCTACCAAACCTTGGCAACACCATTTCAGCCTGTTTGAGAGCGGTACCACACCAGATGCCAAGGAGAAT
GGTACTGATACTGTCCAGGAGGAAGAGGAGAGCCCTGCAGAGGGGAGCAAGGACGAGCCTGGGGAGCAGGTGGAG
CTCAAGGAGGAAGCTGAGGCCCCAGTGGAGGATGGCTCTCAGCCCCCACCCTGAACTAAGGGAGATGCAACC
CCTGAGGGAGAAAAGGCCACAGAAAAGAAAATGGGGACAAGTCTGAGGCCCCAGAAACCAAGTGAGAAGGCAGAG
GCAGGGCCTGAGGGCGTGCCTCCAGCCCCCAGAGGGAGAGAAGAAGCAGAAGCCCCGCCAGGAAGCGGCGAATGGT
AGAGGAGATCGGGGTGGAGCTGGTTGTTCTGGACCTGCCCTGACTTGCCAGAGGATAAGCTGGCTCAGTCCGTGCA
GAACTTCAGGACTTGACACTCCGAGACCTGGAGAAGCAGGAACGGGAAAAAGCTGCCAACAGCTTGAAGCGTT
CATATTTGAGACCCAGGACAAGCTGTACCAGCCCAGTACCAGGAAGTGTCCACAGAGGAGCAGCGTGAGGAGAT
CTCTGGGAAGCTCAGCGCCGCATCCACCTGGCTGGAGGATGAGGGTGTGGAGCCACCACAGTGATGTGAAGGA
GAAGCTGGCTGAGCTGAGGAAGCTGTGCCAAGGGCTGTTTTTCGGGTAGAGGAGCGCAAGAAGTGGCCGAACG
GCTGTCTGCCCTCGATAATCTCCTCAACCATTCCAGCATGTTCTCAAGGGGGCCCGGCTCATCCAGAGATGGA
CCAGATCTTCACTGAGGTGGAGATGACAACGTTAGAGAAAAGTCATCAATGAGACCTGGGCCTGGAAGAATGCAAC
TCTGGCCGAGCAGGCTAAGCTGCCCGCCACAGAGAAGCCTGTGTTGCTCTCAAAAGACATTGAAGCTAAGATGAT
GGCCCTGGACCGAGAGGTGCAGTATCTGCTCAATAAGGCCAAGTTTACCAAGCCCCGGCCCCGGCCTAAGGACAA
GAATGGGACCCGGGCAGAGCCACCCCTCAATGCCAGTGCCAGTGACCAGGGGGAGAAGGTATCCCTCCAGCAGG
CCAGACTGAAGATGCAGAGCCCATTTCAGAACCTGAGAAAAGTAGAGACTGGATCCGAGCCAGGAGACACTGAGCC
TTTGAGTTAGGAGGTCTGGAGCAGAACCCTGAACAGAAAAGAACATCGACAGGACAGAAGCGGCCTTTGAAGAA
CGACGAATATTACCCCCACCTCTGTTTTCCCATTCATCTCCACCCCTTCCCCACCACTTCTATTATTTAA
CATCGAGGGTTGGGGGAGGGGTGGTCCCTGCCCTCGGCTGGAGTTCCTTTCTCA'CCCTGTGATTTGGAGGTGTG
GAGAAGGGGAAGGGAGGGACAGTCACTGGTTCCCTCTGCAGTACCTCTGTGGTTAAAAATGGAACGTGTTCTCCT
CCCCAGCCCCACTCCTGTTCCCTACCCATATAGGCCCAAATTTGGGAAAATCACTATTAATTTCTGAATCCTTTG
CCTGTGCGGTAGGAAGAGAATGGCTGCCAGTGGCTGATGGGTCCCGGTGATGGGAAGGGTATCAGGTTGCTGGGG
AGTTTCCACTCTTCTCTGGTGATTGTTCCCTCCCTCCCTCTCCACCATGCGATGAGCATCCTTTCAGGCC
AGTGTCTGCAGAGCCTCAGTTACCAGGTTTGGTTCTGAGTGCTATCTGTGCTCTTTCCTCCCTCTGCGGGCTT
CTCTTGCTCTGAGCCTCCCTTCCCCATTCCCATGCAGTCTCTTCCCCCTGGGTTTCCTTGGCTTCTCTGCAGCAA

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FIGURE 3355B

ATTGGGCAGTTCTCTGCCCTTGCCTAAAAGCCTGTACCTCTGGATTGGCGGAAGTAAATCTGGAAGGATTCTCA
CTCGTATTTCCACCCCTAGTGGCCAGAGGAGGGAGGGGCACAGTGAAGAAGGGAGCCCACCACCTCTCCGAAGA
GGAAAGCCACGTAGAGTGGTTGGCATGGGGTGCCAGCATCGTGCAAGCTCTGTCATAATCTGCATCTTCCCAGCA
GCCTGGTACCCCAGGTTCCCTGTAACCTCCCTGCCTCCTCCTCTCTTCTGCTGTTCTGCTCCTCCCAGACAGAGCCT
TTCCCTCACCCCCTGACCCCCTGGGCTGACCAAATGTGCTTTCTACTGTGAGTCCCTATCCCAAGATCCTGGGG
AAAGGAGAGACCATGGTGTGAATGTAGAGATGCCACCTCCCTCTCTCTGAGGCAGGCCTGTGGATGAAGGAGGAG
GGTCAGGGCTGGCCTTCCCTCTGTGCATCACTCTGCTAGGTTGGGGGCCCCGACCCACCATACTACGCCTAGGG
AGCCCGTCCTCCAGTATTCCGTCTGTAGCAGGAGCTAGGGCTGCTGCCTCAGCTCCAAGACAAGAATGAACCTGG
CTGTGTCAGTCATTTTGTCTTTTCTTTTTTTTTTTTTTTTTTGGCACATTGGCAGAGATGGGACCTAAGGGTCCCAC
CCCTCACCCCACCCACCTCTTCTGTATGTTTGAATTCCTTCAGTAGCTGTTGATGCTGGTTGGACAGGTTTGA
GTCAAATTGTACTTTGCTCCATTGTTAATTGAGAACTGTTTCAATAAAATATCTTTTCTAC

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FIGURE 3357

GGAGGGCTCAAGGGGCTCTAAGAGGGGAAAAGCTCCCCACACCCCCAGATGCTGCTCCTCCTCCCGGCTAGAGGGA
ACCCAACACCCACCACTGAAATCTGATGCAGCTGGGAGTTTGGACCTTGGGTCTAGACAGCTGGTGCGCCCAAGA
GGTAGGGGGAGGGGTGCGGCTTCTCCCCAGTTCCAGGGAGTCTTGTTTGTAAAGCGGGGCTTGGGCAGTGTTT
TCCTGCTGAGGGTGGTTTTACATTTTTTTTCTCATTGGCCACAGAGAGTGGAGTTGGCCTAGCTCTGACGCGT
CCCCCTCTTTATCCCCAATGTGCCCCCTCCATTAGGGGCTCCAGGTGGGCTCCAGCCCACACTTGCTCTCTGCCTC
TGCTGACACGTGCACACACACACATGCACACACTGCTCCTCTCTGCCTGCTTTCCCTGGAGTCCCATGCCCT
GCCCCATCCAGACACTGCCCAAGGCCACCCGTCTATTTCCACCTCATTCCCCCTTTAAGCTGAGAATGGGGTCT
GCCTATAGAAGCTTCCAGAGACAGCTGAGACTGGGTCCCGGTGCCTCCACCCTAGGATCTCAGGCCTGCCCAA
ACTGCTTCTTACAGCGTGGAGGTTTCTCTGATTTCTCCCTTATCTAGCAACACTTGGTCTTTTGGCTAGTCAGG
GCTGGGATCCCAGGGGGATCCACCTGCAGGAGTCAGAGGTAAAGAAGCATCCACACGGAGGGTAGTGGGGAAGGA
AGCCACATGGCAGAAGCTCTGCAACACAGTCCGAGGGACTGAGGAGTCCATACAATGCCTCACACACAAAGGC
CATTGTCAAAGCCTCGGGCTGGCAGAAAGTGAGGGGGTGGGGCCGCTAGGCCACCTCCTGCTCAGCCACCCCT
GGTCTCATTCTGGGATGAGGGGGAGGGCTTAGGAGAAGCCCTCCCTTTCAGTGCAGATTCCCTTCTTGAATGGG
ACATTGAGTTCTATCAGCCACCCAGACTGGGTCTTCCCATGTATATAATGGAGGAAGACCCCTCCCAGCCCTC
TCAGTCCCCCACTCAAAGTGCCCTCAGTTCTCCATCTGCTCCAGATCCCCTGGCACTCTAGACAGGCATGCC
ATGGGAAGGACCTGGGATGGAGAGGCAGGCTTCGCGGCCCTTCATGCCTGCCACTGGGATTCCAGTTAACTCA
CCCCAGGGTGTGAGGGGCTCTGCAGGATGGCAAGTGTGGGGAGGAGGGAGGCAGACCCTCTGTGCCCCACGGG
CACTGACCCACCCCTGCCATAGGTTTCTAAAGGGAGGXCXAXXAAACCCCTCTCCCTCCCTCCCTCCCTGGTGC
TGCTATTGAACCCCTGCCAGCTCCATTCTGCCCTGGCAACCCTGGGCCAGCAGGTGGGTGCTGCTGTCTGG
CCCTCACTGCCCTGGCCCCAGCCCAGGCTGCCAGTAGCCACGTAGCAGAAGTCTGAAGCCATGCCAGCCCTGGT
GCGGCTCTCCCTCTACACATTGTTGGGTACTGGATAGGGTGAAGTTAGGGGAGAAAATTGTGGAGTCTTTCCAGC
CACAGGGCAGAGGGAGGTGGAGGAGCTGGGTGCTTTTCCAGCAGTATTAGTGTCCCCAGGACAGGGGACCTT
TTCCACATTACATCACTGCCCCATCCCACCTTACAACACTCTGCCCCCTCTGCTTGGTCCCCTTTTCCCCAGGC
AGGAGGCAATCCAGGGGCTGCCTGATAGAGGCATTTCCTGTCCCTGTCTCCTCCTGCATCTCCTTTATCCTGC
ACTGCCACCCTCTATTCCCCATTCTGTGTGGACTTTGAAGGCCCCAAGCCAGCCAAAGCACTGAGTTCCCCCT
TAAGACACCTCCACACCCTCCCCACAAGCAAGCAAAATTTGGGGTCCATGTAGCATGGGCCACGTAGGAGGC
TCCTGACTTGCCAGGGGCCAGCCTCAGCATACCACCGAGCAGCTGCCAGCCTGGGCTGAGGGTGGGCATGAGG
CAGGAGTCAGCACTTGACCTAGGGATGTGAGGTTTCTGTGCCCCAAGTTTGTGGGAAGGTGGGCCTACTGCT
GGGCCCACAGACACAGCCAGCTGGCAAAAGGAGGTCTAGCCCAGCAGAGAGATGAGGACATTTTGCTTCTCCTT
CATGCCCACAGCATGAGCTGAGCTTCTGCTTTGCTGGAAATGAAATAAACTTGGTATGAATTGTGCCAAGGCCTC
CCCAGTTGTCATCCTGCCCTCTTGTGCCCCCTGTCTTGCCCCCACCCACACCCATGCCCTGTTCCTTA
CAGATTTTGATATTGTTCTAATGTGTAATAGAACCAGCCGAGTCCCCCTTTTATCAGAAGGGTCTGAAAAGCAGCA
GCACAGAGTAGGTGAACACAGGCCTGCAAGTGCGACCACCTCAGACCCAGTACGTGTGCCACAGTGGACACACT
CACACCTCCAACACACCCACGCGCAGGCATGTGTACACGCATGTACACACGCATGCATGCACAGCCAGATGGCCA
CTCAGCACAGATGTGGCAGAGGGAATGGTCTGATCCTGCTGAAAGCCATTAAGGAGAAACGAATTTCCAGTGCC
CGGGCTGCAAGAGAGCCTTATAGGGGCCCTGTTTCTTGGGCATGCGCTTCTCTGCCAGCCAACCCCCACTTGCC
CAAGTCACTGGTGCAATAACTTTTCTGCCCTTCTCAGAGCAGAGAAATTGGGAATTGTGTTAGGTGGGTGTGGGC
AGCTCTGCTGAGCCAAGCAGACACGGATGTCCCCTCTTCTGGGAGGAGGGTAGTGCTCCCAGGCCTCAGGAGTCC
AGACAGAGACCCCCAAAGCCTGACTGCCAACAGAAACCCTCTCCTAGTGAGGGGCAGGTGGGTGTGCCCCAGGTC
CCCACACCCACAGGGAGGCTTACACACTGCCCAGTACCGGGGATGCCAGGAGGCAGGCCCTCTGCTGCTGCCA
CTGCTGCCAACACTGCCCAGCTTGTGAGGCCAGGAGGAGCCCTGTCCCACTCGGTGCTGCTGCTCTTCTGACCC
CTGCTGTGAGGAATGGGATTCTTGGTCGAAAAAATTGGTTTTCTTTTTTGTATAAATGAAAAGAATCCAGGAGA
AGCTGCCACCCTCCCCTCCCAGCGTGATGCGCTACCTTGCTTCGGCGTCTTGTCGCCCTTTCCGCCTTTGGTCCA
GGGACAGCCAGCAGATCCTCCTGGTTCTGACCTGGGGGGTGTGTGCATCACCCCTTTTACTTGATTAAAAAA
AAATGATGGGTTGAAAATGTACTGAGGATTAAAAATGTACTTTTTTATAAATAAAGTGTTTAAAC

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FIGURE 3358

CAGGCATCCAAAGCTGAGGTCGCTCCTACGGCCTGGGCTCGCCTTTAGAGATGTTTGGCCTCTTCCCTCC
CAAACAGCCCATCTTCAAAACCTGGACTCTTGGACTGGCACCTGGCCACCTTTCCCTCTACCAAGACTCCACTTC
CGTCTTACCCACTTCTTCCCTCAGATTCTTGGTACCCCTGGGTTGGAGACTGCTCATTTCCTTCCAAATTAATC
CCAGACCCCTAAAATATTGACAACCTTGACAACCCCCCAACCGAGGAGCCAGACTTTGTTTTGGACTAACTTCC
ATAGCCCTATCATGGAGGCAGTGTACCTGGTAGTGAATGGGTTGGGCCTGGTGCTGGACGTGCTGACCTTGGTGT
TGGACCTCAACTTCCCTGCTGGTGTCTCCCTCCCTGGCTTCCCTGGCCTGGCTCCTGGCCTTCGTCTACAACCTGC
CGCACACGGTACTGACTAGTCTTCTGCACCTGGGCGCGGAGTCTTGCTTTTATTGCTGGCCTTGATCGAAGCCG
TGGTCCGGTTACATGTGGGGGCTTGCAGGCCTTGTGTACTCTGCTGTATAGCTGCTGCTCTGGCCTAGAGAGCC
TAAAGCTCCTGGGGCACCTGGCCTCTCATGGGGCACTGCGGAGCAGGGAGATACTGCACCGGGGCGTCTCAATG
TGGTCTCCAGTGGCCATGCTTTGCTGCGCCAGGCCTGTGACATCTGTGCCATTGCCATGAGCCTGGTGGCTTAIG
TGATCAACAGCCTGGTCAACATCTGCCTCATCGGCACTCAGAACCTCTTTTCCCTGGTGCTGGCCCTGTGGGATG
CAGTGACCGGGCCTCTGTGGAGGATGACAGACGTAGTGGCTGCCTTCCTAGCCACATTTCCAGCAGTGCTGTGG
CCATGGCCATCCTCCTTTGGACACCCTGCCAACTAGCCCTGGAGCTGCTGGCCTCAGCTGCCCCGCTCCTGGCCA
GCTTTGTGCTTGTCAATCTCACTGGCTTGGTGTGCTAGCTTGTGTGCTGGCAGTGACGGTGACTGTGTTGCATC
CGGACTTCACCCTGAGGCTGGCTACCCAGGCACTCAGCCAGCTCCATGCCCCGCCATCCTACCACCGTCTTCGAG
AGGATGTATGCGGCTCTCTCGCCTAGCACTGGGCTCAGAGGCCTGGCGCCGAGTCTGGAGCCGCACTGTGCAGC
TGGCGAGTTGGCCAAACCGGGGAGGGGCACCTGGAGCTCCCCAGGGTGACCCTATGAGGGTATTCTCAGTTAGGA
CCCGGAGACAGGACACTCTTCTGAAGCGGGGCGCAGATCAGAGGCAGAAGAGGAGGAGGCCAGGACCATCAGAG
TGACACCTGTGAGGGGCCGAGAGAGGCTCAATGAGGAGGAGCCTCCAGGTGGGCAAGACCCCTTGGAAATTGCTGA
AGGAGCAAGAGGAGCGGAAGAAGTGTGTCTATCTGCCAGGACCAGAGCAAGACAGTGTTGCTCCTGCCCTGCCGGC
ATCTGTGCTGTGCCAGGCCTGCACTGAAATCCTGATGCGCCACCCCGTCTACCACCGCAATTGCCCGCTCTGCC
GCCGGGGCATCCTGCAGACCCTCAATGTCTACCTCTGAAGCCTCCTTCCCTGCCTGCCCCACCCCTCCATGCTCCA
CGCAGGCACTCAGCTAGGACAGCATTAAAC

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FIGURE 3359

GGCACGAGGGGGCCACCGAGGCGCTGTCCCTGACCACCAGCACGAGACCCCTTTCTATCGCGCCAGTCCTGTGGTC
TCCGCACCTCTCCAGCTCCTGCACCCCCGGCCCCCGTGGTTCCAGCCGCACAGTAGCGTGTCTGGGTAGCGTG
AGGACCCACGGGGCTGAGCAGGTGCCACGAGCCCGCGCCTCTTCGCCGCCGCCGCTCTCCTCCTCTCCCGCC
CGCCGCTGGCCCTCCCTTACCAGGCTGAGCCTCTGGCTGCCAGAAGCGCGGGGCTCCGGGAGAATACGTGCGG
TCGCCCGCTCCGCGTGCCTACGCCTTCTGCTCCAGTTGCTTTCCCAATTGAGCGGAAAAGCCGGGGCATGTTG
CCGGGGCCCTGGGCGGGACGGTTGTGCCCTGCAGCCCGAAGCCCGCGGGGCACCTTCCCGCCACGAGCTGCCC
AGTCCCTCTGCTTGC GGCCCTGCCAACGTCCCACAGGACACTGGGTCCCCTTGGAGCCTCCCCAGGCTTAATGA
TTGTCCAGAAGGCGGCTATAAAGGGAGCCTGGGAGGCTGGGTGGAGGAGGAGCAGAAAAAACCCTCAGCAG
ATCTGGGAAGTGTGAGAGCGGCAAGCAGGAAGTGTGGTCAGAGGCTGTGCGTCTTGGCTGGTAGGGCCTGCTCTT
TTCTACCATGGCAGCCAGGGCTATGGCTATTATCGCACTGTGATCTTCTCAGCCATGTTTGGGGGCTACAGCCT
GTATTACTTCAATCGCAAGACCTTCTCCTTTGTCATGCCATCATTGGTGGAAGAGATCCCTTTGGACAAGGATGA
TTTGGGGTTTATCACCAGCAGCCAGTCGGCAGCTTATGCTATCAGCAAGTTTGTGAGTGGGGTGCTGTCTGACCA
GATGAGTGTCTGCTGGCTCTTCTCTTCTGGGCTGCTCCTGGTTGGCCTGGTCAACATATTCTTTGCCTGGAGCTC
CACAGTACCTGTCTTTGCTGCCCTCTGGTTCCCTTAATGGCCTGGCCAGGGGCTGGGCTGGCCCCCATGTGGGAA
GGTCTGCGGAAGTGGTTTGAGCCATCTCAGTTTGGCACTTGGTGGGCCATCCTGTCAACCAGCATGAACCTGGC
TGGAGGGCTGGGCCCTATCCTGGCAACCATCCTTGGCCAGAGCTACAGCTGGCGCAGCACGCTGGCCCTATCTGG
GGCACTGTGTGTGGTTGTCTCCTTCTGTCTCCTGCTCATCCAAATGAACCTGCTGATGTTGGACTCCGCAA
CCTGGACCCCATGCCCTCTGAGGGCAAGAAGGGCTCCTTGAAGGAGGAGAGCACCTTGCAGGAGCTGCTGCTGTC
CCCTTACCTGTGGGTGCTCTCCACTGGTTACCTTGTGGTGTGTTGGAGTAAAGACCTGCTGTACTGACTGGGGCCA
GTTCTTCTTATCCAGGAGAAAGGACAGTCAGCCCTTGTAGGTAGCTCCTACATGAGTGGCCTGGAAGTTGGGGG
CCTTGTAGGCAGCATCGCAGCTGGCTACCTGTGACAGCCGGGCCATGGCAAAGGCGGGACTGTCCAACCTACGGGAA
CCCTCGCCATGGCCTGTTGCTGTTTATGATGGCTGGCATGACAGTGTCCATGTACCTCTTCCGGGTAACAGTGAC
CAGTGAATCCCCAAGCTCTGGATCCTGGTATTGGGAGCTGTATTGGTTTCTCCTCGTATGGCCCCATTGCCCT
GTTTGGAGTCATAGCCAACGAGAGTGGCCCTCCCAACTTGTGTGGCACCTCCCACGCCATTGTGGGACTCATGGC
CAATGTGGGCGGCTTTCTGGCTGGGCTGCCCTTACGACCATTTGCCAAGCACTACAGTTGGAGCACAGCCTTCTG
GGTGGCTGAAGTGATTTGTGCGGCCAGCACGGCTGCCTTCTTCTCCTACGAAACATCCGCACCAAGATGGGCCG
AGTGTCCAAGAAGGCTGAGTGAAGAGAGTCCAGGTTCCGGAGCACCATCCCACGGTGGCCTTCCCCCTGCAGCT.
CTGCGGGGAGAAAAGGAGGGGCTGCCTGGCTAGCCCTGAACCTTTCACTTTCCATTCTGCGCCTTTTCTGTCA
CCCGGGTGGCGCTGGAAGTTATCAGTGGCTAGTGAGGTCCAGCTCCCTGATCCTATGCTCTATTTAAAAGATAA
CCTTTGGCCTTAGACTCCGTTAGCTCCTATTTCTGCCTTCAGACAAACAGGAACTTCTGCAGTCAGGAAGGCT
CCTGTACCCTTCTTCTTTTCTAGGCCCTGTCTGCGCCGATCCTACCCCATCCCCACCTGAAGTGAGGCTATCC
CTGCAGCTGCAGGGCACTAATGACCCTTGACTTCTGCTGGGTCTAAGTCTCTCAGCAGTGGGTGACTGCTGTT
GCCAATACCTCAGACTCCAGGAAAGAGAGGAGGCCATCATTCTCACTGTACCACTAGGCGCAGTTGGATATAGG
TGGGAAGAAAAGGTGACTTGTATAGAAGATTAAACTAGATTGATACTGAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

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FIGURE 3360

MAAQGYGYRTVIFSAMFGGYSLYYFNRKTF SFVMP SLVEE IPLDKDDLGFITSSQSAAYAISKFVSGVLSQMS
ARWLFSSGLLLVLNIFFAWSSTVPVFAALWFLNGLAQGLGWPPCGKVLRKWFEP SQFGTWAILSTSMNLAGG
LGPILATILAQSYSWRSTLALSGALCVVVSFLCLLLIHNEPADVGLRNLDMPMPSEGKKGSLKEESTLQELLSPY
LWVLSTGYLVVFGVKTCTDWGQFFLIQEKQSALVGSSYMSALEVGGLVGSIAAGYLSDRAMAKAGLSNYGNPR
HGLLLFMMAGMTVSMYLFRTVTSDSPKLWILVLGAVFGFSSYGP IALFGVIANESAPPNL CGTSHAIVGLMANV
GGFLAGLPFSTIAKHYSWSTAFWVAEVICAASTAAFFLLRNIRTKMGRVSKKAE

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FIGURE 3361

CTTCCTTTTTGTCCGACATCTTGACGAGGCTGCGGIGTCTGCTGCTATTCTCCGAGCTTCGCAATGCCGCCTAAG
GACGACAAGAAGAAGAAGGACGCTGGAAAGTCGGCCAAGAAAGACAAAGACCCAGTGAACAAATCCGGGGGCAAG
GCCAAAAGAAGAAGTGGTCCAAGGCAAAGTTCGGGACAAGCTCAATAACTTAGTCTTGTTTGACAAAGCTACC
TATGATAAACTCTGTAAGGAAGTTCCCAACTATAAACTTATAACCCAGCTGTGGTCTCTGAGAGACTGAAGATT
CGAGGCTCCCTGGCCAGGGCAGCCCTTCAGGAGCTCCTTAGTAAAGGACTTATCAAAGTGGTTCAAAGCACAGA
GCTCAAGTAATTTACACCAGAAATACCAAGGGTGGAGATGCTCCAGCTGCTGGTGAAGATGCATGAATAGGTCCA
ACCAGCTGTACATTTGGAAAAATAAACTTTATTAAATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3362

MPPKDDKKKKDAGKSAKKDKDPVNKSGGKAKKKKWSKGVKRDKLNVLFDKATYDKLCKEVPNYKLITPAVVSE
RLKIRGSLARAALQELLSKGLIKLVSKHRAQVIYTRNTKGGDAPAAGEDA

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FIGURE 3363

GAAGAAAACAGCCCAAAGATGAGAGTGATTGCGGTGGGTACCCGCAAGAGCCAGCTTGCTCGCATACAGACGGAC
AGTGTGGTGGCAACATTGAAAGCCTCGTACCCTGGCCTGCAGTTTGAAATCATTGCTATGTCCACCACAGGGGAC
AAGATTCTTGATACTGCACTCTCTAAGATTGGAGAGAAAAGCCTGTTTACCAAGGAGCTTGAACATGCCCTGGAG
AAGAATGAAGTGGACCTGGTTGTTCACTCCTTGAAGGACCTGCCCACTGTGCTTCCTCCTGGCTTCACCATCGGA
GCCATCTGCAAGCGGGAAAACCCCTCATGATGCTGTTGTCTTTACCCAAAATTTGTTGGGAAGACCCTAGAAACC
CTGCCAGAGAAGAGTGTGGTGGGAACCAGCTCCCTGCGAAGAGCAGCCAGCTGCAGAGAAAGTTCCCGCATCTG
GAGTTCAGGAGTATTCGGGGAAACCTCAACACCCGGCTTCGGAAGCTGGACGAGCAGCAGGAGTTCAGTGCCATC
ATCCTGGCAACAGCTGGCCTGCAGCGCATGGGCTGGCACAACCGGGTGGGGCAGATCCTGCACCCTGAGGAATGC
ATGTATGCTGTGGGCCAGGGGGCCTTGGGCGTGGAAGTGCAGCCAAGGACCAGGACATCTTGGATCTGGTGGGT
GTGCTGCACGATCCCGAGACTCTGCTTCGCTGCATCGCTGAAAGGGCCTTCCTGAGGCACCTGGAAGGAGGCTGC
AGTGTGCCAGTAGCCGTGCATACAGCTATGAAGGATGGGCAACTGTACCTGACTGGAGGAGTCTGGAGTCTAGAC
GGCTCAGATAGCATACAAGAGACCATGCAGGCTACCATCCATGTCCCTGCCAGCATGAAGATGGCCCTGAGGAT
GACCCACAGTTGGTAGGCATCACTGCTCGTAACATTCCACGAGGGCCCCAGTTGGCTGCCAGAAGTTGGGCATC
AGCCTGGCCAACCTTGTTGCTGAGCAAAGGAGCCAAAACATCCTGGATGTTGCACGGCAGCTTAACGATGCCCAT
TAACTGGTTTTGTGGGGCACAGATGCCTGGGTGCTGCTGTCCAGTGCCCTACATCCCGGGCCTCAGTGCCCCATTC
TCACTGCTATCTGGGGAGTGATTACCCCGGGAGACTGAACTGCAGGGTTCAAGCCTTCAGGGATTGCTCACC
TTGGGGCCTTGATGACTGCCTTGCCTCCTCAGTATGTGGGGGCTTCATCTCTTTAGAGAAGTCCAAGCAACAGCC
TTTGAATGTAACCAATCCTACTAATAAACAGTTCTGAAGGT

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FIGURE 3364

CGCAGACCTATGAATGAAGATGGAGGGAGAGCTGATGTGAAAGGCCTGGGTCCCGGCCGCAGAAGGGGCGCCAGA
CCGAAATCAGCGATCGCGTCTCTCCACCAAAGCCTCCCGGCCAGCGGCCGCGTCTGAAAGAAGAAAACAGCCCA
AAGATGAGAGTGATTGCGTGGGTACCCGCAAGAGCCAGCTTGCTCGCATACAGACGGACAGTGTGGTGGCAACA
TTGAAAGCCTCGTACCCTGGCCTGCAGTTTGAAATCATTGCTATGTCCACCACAGGGGACAAGATTCTTGATACT
GCACTCTCTAAGGGATTCACTCAGGCTCTTTCTGTCCGGCAGATTGGAGAGAAAAGCCTGTTTACCAAGGAGCTT
GAACATGCCCTGGAGAAGAATGAAGTGGACCTGGTTGTTCACTCCTTGAAGGACCTGCCCACTGTGCTTCCTCCT
GGCTTCACCATCGGAGCCATCTGCAAGCGGGAAAACCTCATGATGCTGTTGTCTTTCACCCAAAATTTGTTGGG
AAGACCCTAGAAACCCTGCCAGAGAAGAGTGTGGTGGGAACCAGCTCCCTGCGAAGAGCAGCCCAGCTGCAGAGA
AAGTCCCGCATCTGGAGTTCAGGAGTATTGTATCCTTTTAG

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FIGURE 3365

ATGTCGGGCGCGGCAAGACTGGCGGCAAGGCCCCGCGCCAAGGCCAAGTCGCGCTCGTCGCGCGCCGGCCTCCAG
TTCCCAGTGGGCCGTGTACACCGGCTGCTGCGGAAGGGCCACTACGCCGAGCGCGTTGGCGCCGGCGCGCCAGTG
TACCTGGCGGCAGTGCTGGAGTACCTCACCGCTGAGATCCTGGAGCTGGCGGGCAATGCGGCCCGCGACAACAAG
AAGACGCGAATCATCCCCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGCTCAACAAGCTGCTGGGCGGC
GTGACGATCGCCAGGGAGGCGTCCTGCCCAACATCCAGGCCGTGCTGCTGCCAAGAAGACCAGCGCCACCGTG
GGGCCGAAGGCGCCCTCGGGCGGCAAGAAGGCCACCCAGGCCTCCCAGGAGTACTAA

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FIGURE 3366

CCCAGAATCCCAGGGAGTGATCAGCGGTGCTGTTTTCCCTTATCATCCTCTTCTGCTTCATCCCTTTCCCCCTTCCT
GAACTGCTTTGTGAAGGAGCAGTGTAAGGCATTCCCCCACCATGAATTTGTGGCCCTGATAGGTGCCCTCCTTGC
CATCTGCTGCATGATCTTCCTGGGCTTTGCGGATGATGTACTGAATCTGCGCTGGCGCCATAAGCTGCTGCTACC
TACAGCTGCCTCACTACCTCTCCTCATGGTCTATTTACCAACTTTGGCAACACGACCATTGTGGTGCCCAAGCC
CTTCCGCCCCGATACTTGGCCTGCATCTGGACTTGGGAATCCTGTACTATGTCTACATGGGGCTGCTGGCAGTGTT
CTGTACCAATGCCATCAATATCCTAGCAGGAATTAACGGCCTAGAGGCTGGCCAGTCACTAGTCATTTCTGCTTC
CATCATTGTCTTCAACCTGGTAGAGTTGGAAGGTGATTGTCGGGATGATCATGTCTTTTCCCTCTACTTCATGAT
ACCCTTTTTTTTACCACCTTTGGGATTGCTCTACCACAACCTGGTACCCATCACGGGTGTTTGTGGGAGATACCTT
CTGTTACTTTTGTGGCATGACCTTTGCCGTGGTGGGCATCTTGGGACACTTCAGCAAGACCATGCTACTATTCTT
CATGCCCCAGGTGTTCAACTTCCTCTACTCACTGCCTCAGCTCCTGCATATCATCCCTGCCCTCGCCACCGCAT
ACCCAGACTCAATATCAAGACAGGCAAACCTGGAGATGAGCTATTCCAAGTTCAAGACCAAGAGCCTCTCTTTCTT
GGGCACCTTTATTTTAAAGGTGGCAGAGAGCCTCCAGCTGGTGACAGTACACCAGAGTGAGACTGAAGATGGTGA
ATTCACTGAATGTAACAACATGACCCTCATCAACTTGCTACTTAAAGTCCTTGGGCCCCATACATGAGAGAAACCT
CACATTGCTCCTGCTGCTGCTGCAGATCCTGGGCAGTGCCATCACCTTCTCCATTGATATCAGCTCGTTTCGACT
CTTCTATGATGTCTGAGTCCCTTGATCATTGTCTTTACCTCACAGTCTCTAGGATTCTTGACTCAGGCTGACCT
CTCTCTCTGGTCCCAGACTGCCTCCTTGCCCAGGCCTCTCTCACTCTTCATACTCCTCCAGATTTTGTTCCTCAGC
ATTTTCCCTTTCTCTGTGATCATTGGCATCCTGGGCGTTTCTTGCCCTCTGCTGACTACTGATTGGATTTTACCTA
TGGCTTTCTGCAACTTGCTACTCTCTCCCTCTCCATCCCATCTTGACGCCCTCATAGGGTGGGATACAGCAGCTTT
TTTGAGTTATCCACACTCACATTTAGAGTCTGACTCTCAAGGAACCACTGGTTTTTGGGATAGAAGTTGGGC
CAGGGCTAGGAACACAGGCTCCACGGTGACATGTCATTTGATTGTAAATTAAGTGTTCTGATTAGTAAGAACTAA
GCAGGGGGCCACATGCTCTCAATGGAGACAATAAAGTGTTGCTTTTTCTT

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FIGURE 3367A

GCATGATTCCAGCAGGGGGCCGAGCCCCCTGGGCCCCCTACAGCCCTGTTCTTGCAGAATCAGAAAGTCTGGTAA
ATGGGAACACACCCACAGACTGCAACACGGGGACCCCTGTCCTGTGCCAGCCACAGTTCCCTGGTGAGCTCTA
TTGAGAAGGACCTGCAAGAGATCATGGACTCACTGGTGCTAGAGGAGCCTGGAGCTGCTGGCAAGAAGCCTGCCG
CAACCTCTCCACTGTCACCGATGGCTAATGGTGGGCGCTACCTGCTGTCTCCCCAACCCAGCCCCGGCGCCATGT
CTGTGGGCTCCAGCTATGAGAACACCTCTCCAGCCTTCTCTCCACTTCTGCGGTTTGGGTTTCATGGCCAACTG
TAAGTGATGAGAGACACTTGAGGAGGTCTAGGGACCCTAGAGAGCCATGGAAGCCTCACAAACCAGGCTTCAGGC
CTATAGGTAGGCCTGCGGGAAAAGGCAACAAGACCAGGAATGTGATTGTGTATCCCTCCTTTACCTCCTAGGC
CCCTGAGAGGTGACTGTATCTGGGTGGGTGTGTATGTGGAGAGGGGTGGATGAAGTGGTAGGGCCATGGGAGTAC
TCACTCATGGGCCTGGGCATTCAAGGACTGGCAGCAGCCCATCCTGCTGATAAACAGCCAAGGGCTGCCTGAGGG
TAACTTGGAGCTGAGGTGGGGACAAAGAGGGGCCGTGTCCTTGGTCTACCTCTTCTCCATGTATGTCTGTGTTGG
GTGTCTGGTCCCTGTGGGCTCATGGGTCTGTTTTCCAGCACTGTCTGTCTGCATACATGCCACCTGTCTGTATG
CTAGACTGTGTTTATCTGTGAGTGTGCATCAGTGTGCATTTGTGCATGTCAGGGCTGGTGTCTCTGTACTTGCCT
ATTAATGCAGGGCCAGGGCACATGTTGTATCCTTGTGTGCCTGTGCATCAGTGTGCTGTGTGTCAGTATGTGTCT
TGTGTCTGTAGATCTGTGTGTACCTGCGTCAGGACGAGCAACTGAGTTATCTGTGTCTCATTGTGGTCTGTAGT
CTGCTTAACAGTGTGTTTTCTGTATGTGTTTAGTGTGTTACTGTGGGTCCATTTGGTGTGTTCTGTGTGTCTGG
GGTAGACTGAAAAAAGAAAGGAACAGGAAGATGGAAGGGGCTGTCCAGAAGTGGGCAGGAAGAACCAGGCTGTT
ATGCCATGTGGGCATGTGGCACAACAGCCTCGTTCTTCTGCCCACTTCTGGGGCACCTTGTTTCCCTCTGCCTC
CCCTAGGTCTTGGGGTCAGGCCTCTCCTGACTTGACACTGATGTCTAGCCCCCTGTAACCTGTCTCTCCCTCCT
GACAGGATACTGAACCTGGCTCTATCCCCACCAGGGCTCAGCTTCTCCCTTCATGTCTGTCTGTCCATCCT
CCCCAGGAACGCCAGCGCCTGGAGACCATCCTGAACCTGTGTGCCGAATACAGCCGGGCTGATGGGGGACCTGAG
GCTGGGGAGCTTCCCAGCATTGGGGAGGCCACCGCAGCATTGGCACTGGCAGGCCGGAGGCCCTCACGAGGCCTT
GCAGGGGCCTCTGGGCGGAGCAGCGAGGAGCCTGGCGTTGCCACCCAACGCCTATGGGAGAGTATGGAGCGCTCA
GATGAGGAAAATCTCAAGGAGGAGTGCAGCAGCACTGAGAGCACCCAGCAGGAGCACGAAGATGCACCTAGCACC
AAGCTCCAGGGAGAGGTGCTAGCCCTGGAAGAAGAGCGGGCTCAGGTGCTGGGGCACGTGGAGCAGCTCAAGGTC
CGTGTGAAGGAGCTAGAGCAGCAGCTGCAGGAGTCAGCCCCGAGAGGCCGAAATGGAGCGGGCACTGCTGCAGGGA
GAGAGGGAGGCAGAGCGGGCACTGCTGCAGAAGGAGCAGAAGGCAGTGGATCAGCTGCAGGAGAAGCTGGTGGCC
TTGGAGACAGGCATCCAGAAGGAGAGGGACAAGGAGGCAGAGGCCCTGGAGACTGAGACAAAGCTCTTTGAGGAC
TTGGAGTTCCAGCAGTTGGAGCGGGAGAGCCGCGTGGAGGAGGAGCGCGAGCTGGCCGGCCAGGGGCTGCTCCGG
AGCAAGGCTGAGCTGCTCCGCAGCATCGCCAAGAGGAAGGAGCGCCTGGCCATCCTGGACAGTCAGGCTGGGCAG
ATCCGGGCTCAGGCCGTGCAGGAATCAGAACGCCTGGCCCGGGACAAGAATGCCTCCTTACAGCTGCTGCAAAAG
GAGAAGGAGAAGCTGACTGTGCTGGAAAGGAGATACCACTCACTCACAGGGGGCAGGCCTTTCGGAAGACCACA
TCGACCCTCAAAGAGATGGAGAAGCTGCTGCTCCCTGCTGTAGACTTAGAGCAGTGGTACCAGGAGCTGATGGCC
GGGCTGGGGACTGGCCCCGCTGCAGCCTCCCTCACTCTTCTCCCCCGCTCTGCCCGCCAAAGCTTCCCGTCAG
CTGCAGGTTTACCGCTCCAAGATGGATGGCGAGGCCACCAGCCCCCTTCCCCGGACCCGCAGCGGCCCTTCCCC
TCCTCCTCTGGCTCTTCTCCTCCTCCTCCTCCAGCTCAGCGTGGCTACCCTGGGGCGTAGCCCTCCCCAAGAGC
GCTCTACTACCCAGAATGGCACGGGCAGCCTTCTCGCAACCTGGCAGCCCACTGCAGGACATCGAGACCAAG
CGCCAAGTACTGCTGTCAGCAGAAGGGACAACAAGTGATTGAAGAGCAGCGCGCGGACTGGCTGAGCTGAAGCAG
AAAGCGGCAGCTGAGGCACAGTGCCAGTGGGATGCCCTTACGGGGCAGCACCTTCCCAGCGGGCCCCCTCGGGC
TTCCCCCTCTCATGCACCACTCTATCCTACACCACCTGCCTGCGGGCGGGAGCGTGGGGAGGAGGGTGAGCAG
GCCTATGATACGCTGAGTCTGGAGAGCTCTGACAGCATGGAGACCAGCATCTCCACCGGGGGCAACTCGGCCCTGC
TCCCCTGACAACATGTCCAGCGCGAGTGGTCTGGACATGGGGAAGATCGAGGAGATGGAGAAGATGCTGAAAGAG
GCTCATGCAGAGAAGAACCGGCTCATGGAGTCGAGGGAGCGGGAGATGGAGCTGCGGCGGCAGGCCCTGGAGGAG
GAGCGGCGGAGGCGTGAGCAGGTAGAACGGAGGCTGCAGAGTGAGAGTGCCCGGAGGCACAGCTGGTTCGAGAAG
GAGGTCAAGATGCGGGAGAAACAATTTTCCAGGCACGACCCCTGACCCGCTACCTGCCAATCCGGAAGGAGGAC
TTTGACCTGAAGACACATATTGAGTCATCGGGCCATGGTGTGTATACCTGCCTGCAGCTGGTGTCTCAGCAGCAAG
GTCTGCCGTGGCTACTTGGTCAAGATGGGCGGCAAGATTAATCATGGAAGAAGCGCTGGTTTGTCTTCGACCGG
CTCAAGCGCACCCCTTCTTATTATGTGGACAAGCATGAGACGAAGCTGAAGGGAGTCATCTATTTCCAGGCCATT
GAGGAAGTGTACTACGACCACCTGCGCAGTGCAGCCAAGAAGAGGTTTTTCCGCTTCACTATGGTGACTGAGAGC

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FIGURE 3367B

CCGAACCCAGCCCTCACCTTCTGCGTAAAGACCCATGACCGGCTGTACTACATGGTGGCCCCATCTGCAGAGGCC
ATGCGTATCTGGATGGATGTCATTGTCACAGGGGCTGAGGGCTACACTCAGTTCATGAACATACTGCCGTGGGCC
TCCTGGCAGAGCACAACTGGGGCTTTTGATAAGAAGACTTTAATATTCTGTAAGGAGCTTGGTCCTGTGAGTTT
CTGGGCTCTGGCCTCCTGAAGAACCAGCCAGAAGAAGAAAAGTAGAGGTGGCTTTGCTGCCTCCTGGGAGCCCAG
AACTTGAGTAACCCCTTTAGGGTCCTGCCCCAGGCCCAGCCAGGGCTGAGGAGCTGTCACAGAGAGGGCCTCAGC
TCTGACCTGACACCTGCTCTCCCCAGCCTGTTTTCTCTTTTCTAAAAGACAAATTATGGTACCATAAGCTGCCAA
AGATCCCCCTCCTGCCTCAGACCCCTTTGCCAGGGGCTTTGGGGGCTGAGCAGAGCCACATCCAGAGTGGGGTAAT
AGCTCAGGCGGCCCGCTTCCCATTTCTCAAACCCCGCTCTGCCCCATTGTTCTCCTTTCCCTTATACTTTTTATT
ACCTTGCTCAAGGGCCAGAGATCTCAAGTGTCACCTTGAGGTCCCAGCTCCATCCCCCTAGTTGCAGACTCATCA
CCATGGTTACCATAGTGACTGCTTCATTGCCATGGTTACATACTAATTGCTGCAGCTCTGTGGCCCAGCCCCTG
CTTCAGCTGTGGGCCATCTGAGGGTACGTGCCATCATCTCTCCAGCCCAGGCCCTGGGCATCTCATGCTGGGGG
GAAGGGACTGAATACCTTTTTCTTCCCCCTGCCTGTGTCTTCAGCCCTGATGCACAGGCTGCCAGCCCCCAGT
CCAGCCCTCTCCCTTCCACTGGTGCCTTGCTTAGAGCCAGAAGGGATGAAGCCGGGGGATCTATGGAACAGAGGA
GGAGCGATGCAGTTGGGAGAGGAAGCTAGAAGGGTTATGGTTGGAGTTCTGTACAGTGTGAGTTCCGACAGGG
AAAGAGGATTCTCCAATGCTCCTAGAGAGAAAGCCTGAGCAGGAGATGATGCAGCAGAGGGGAAGGGCCCTGTG
GTGCCGCCGCCCTTCTTTCAGCCTCCGAAGGGTGATGGAAATGGAGAGTGGAGGACCAGGCCTCCAGCTGTCTGG
CCTCGCCCTTCACGCCTTAACACTAAGCCCACCTCCCCTGCTCTCCTTCCCAGCATTGAGCCCTTGGTTGCCTGG
GCCCAGGCTGGGGGTTTTAGTATTTGTAAGCATTTTCAGCAGAACATAAAGCCTTTGGACTACGGAA

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FIGURE 3368

MDALNRNQIGPGCQTQTMVQKGPLDLIETGKGLKVQTDKPHLVSLGSGRLSTAITLLPLEEGRTVIGSAARDISL
QGPGLAPEHCYIENLRGTLTLYPCGNACTIDGLPVRQPTRLTQGCMCLIGQSTFLRFNHPAEAKWMKSMIPAGGR
APGPPYSPVPAESES LVNGNHTPQTATRGPSACASHSSLVSSIEKDLQEIIMDSLVL EEPGAAGKKPAATSPLSPM
ANGGRYLLSPPTSPGAMSVGSSYENTSPAFSPLSSPASSGSCASHSPSGQEPGPSVPP LVPARSSSYHLALQPPQ
SRPSGARSESPRLSRKGGHERPPSPGLRGLLTDSPAATVLA EARRATESPRLGGQLPVVAISLSEYPASGALSQP
TSIPGSPKFQPPVPAPRNKIGTLQDRPPSPFREPPGSEVLTTSPSRQLVGRTFSDGLATRTLQPPESPRLGRRG
LDSMREL PPLSPSLRRALSPLPTRTTDPKLNREVAESPRPRRWAAGASPEDFSLTLGARGRRTRSPSPTLGE
SLAPHKGSFSGRLSPAYSLGSLTGASPCQSPCVQRKLSSGDLRVPVTRERKNSITEISDNEDDLLEYHRRQRQER
LREQEMERLERQRLETILNLCAEYSRADGGPEAGELPSIGEATAALALAGRRPSRGLAGASGRSSEEPGVATQRL
WESMERSDEENLKEECSSTESTQQEHEDAPSTKLQGEVLAL EEEERAQVLGHVEQLKVRVKELEQQQLQESAREAEM
ERALLQGEREAERALLQKEQKAVDQLQEKLVLETG IQKERDKEAELETETKLFEDLEFQQLERESRVEEEREL
AGQGLLRSKAELLRSIAKRKERLA ILDSQAGQIRAQAVQESERLARDKNASLQLLQKEKEKLTVLERRYHSLTGG
RPFPKTTSTLKEMEKLLLPVDLEQWYQELMAGLGTGPAAASPHSSPPPLPAKASRQLQVYRSKMDGEATSPLPR
TRSGPLPSSSGSSSSSSSSQLSVATLGRSPSPKSALLTQNGTGSLPRNLAATLQDIETKRQLALQOKGQQVIEEQRR
RLAELKQKAAAEACQWDALHGAAPFPAGPSGFPPLMHHSILHHLPAGRERGEEGEHAYDTLSLESSDSMETSIS
TGGNSACSPDNMSSASGLDMGKIEEMEKMLKEAHA EKNRLMESREREMELRRQALEEEERRRREQVERRLQSESAR
RQQLVEKEVKMREKQFSQARPLTRYLP IRKEDFDLKTHIESSGHGVDTC LHVVLSKVCRGYLVKMGGKIKSWKK
RWFVFDRLKRTL SYYVDKHETKLKGVIIYFQAIEEVYYDHLRSAAKKRFFRFTMVTESPNPALTF CVKTHDRLYYM
VAPSAEAMRIWMDVIVTGAEGYTQFMN

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FIGURE 3369

CCCAGGCTCCTCGGGACTCGGCGGGTCCTCCTGGGAGTCTCGGAGGGGACCGGCTGTGCAGACGCC**ATG**GAGTTG
GTGCTGGTCTTCCTCTGCAGCCTGCTGGCCCCCATGGTCCTGGCCAGTGCAGCTGAAAAGGAGAAGGAAATGGAC
CCTTTTCATTATGATTACCAGACCCTGAGGATTGGGGGACTGGTGTTGCTGTGGTCCTCTTCTCGGTTGGGATC
CTCCTTATCCTAAGTCGCAGGTGCAAGTGCAGTTTCAATCAGAAGCCCCGGGCCCCAGGAGATGAGGAAGCCCAG
GTGGAGAACCTCATCACCGCCAATGCAACAGAGCCCCAGAAAGCAGAGA**ACTGA**AGTGCAGCCATCAGGTGGAAG
CCTCTGGAACCTGAGGCGGCTGCTTGAACCTTTGGATGCAAATGTCGATGCTTAAGAAAACCGGCCACTTCAGCA
ACAGCCCTTTCCCCAGGAGAAGCCAAGA**ACT**TGTGTGTCCCCCACCTATCCCCCTCTAACACCATTCCCTCCACCT
GATGATGCAACTAACACTTGCCCTCCCCACTGCAGCCTGCGGTCTGCCCACCTCCCGTGATGTGTGTGTGTGTGT
GTGTGTGTGTGACTGTGTGTGTTTGCTAACTGTGGTCTTTGTGGCTACTTGTTTGTGGATGGTATTGTGTTTGTT
AGTGA**ACT**GTGGACTCGCTTTCCCAGGCAGGGGCTGAGCCACATGGCCATCTGCTCCTCCCTGCCCCCGTGGCCC
TCCATCACCTTCTGCTCCTAGGAGGCTGCTTGTTGCCCAGACCAGCCCCCTCCCCTGATTTAGGGATGCGTAGG
GTAAGAGCACGGGCAGTGGTCTTCAGTCGTCTTGGGACCTGGGAAGGTTTGCAGCACTTTGTCATCATTCTTCAT
GGACTCCTTTTACTCCTTTAACAAAAACCTTGCTTCTTATCCACCTGATCCCAGTCTGAAGGTCTCTTAGCAA
CTGGAGATACAAAGCAAGGAGCTGGTGAGCCCAGCGTTTGACGTCAGGCAGGCTATGCCCTTCCGTGGTTAATT
CTTCCCAGGGGCTTCCACGAGGAGTCCCCATCTGCCCGCCCCCTTACAGAGCGCCCCGGGGATTCCAGGCCCAGG
GCTTCTACTCTGCCCTGGGGAATGTGTCCCTGCATATCTTCTCAGCAATAACTCCATGGGCTCTGGGACCTTA
CCCCTTCCAACCTTCCCTGCTTCTGAGACTTCAATCTACAGCCAGCTCATCCAGATGCAGACTACAGTCCCTGC
AATTGGGTCTCTGGCAGGCAATAGTTGAAGGACTCCTGTTCCGTTGGGGCCAGCACACCGGGATGGATGGAGGGA
GAGCAGAGGCCTTTGCTTCTCTGCCTACGTCCCCTTAGATGGGCAGCAGAGGCAACTCCCGCATCCTTTGCTCTG
CCTGTCCGTGGTCAGAGCGGTGAGCGAGGTGGGTTGGAGACTCAGCAGGCTCCGTGCAGCCCTTGGGAACAGTGA
GAGGTTGAAGGTCATAACGAGAGTGGGA**ACT**CAACCCAGATCCCGCCCCCTCTGTCTCTGTGTTCCCGCGGAAA
CCAACCAAACCGTGCCTGTGACCCATTGCTGTTCTCTGTATCGTGATCTATCCTCAACAACAACAGAAAAAGG
AATAAAATATCCTTTGTTTCCTAGTGA

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FIGURE 3370

MELVLVFLCSLLAPMVLASAAEKEKEMDPFHYDYQTLRIGGLVFAVVLF SVGILLILSRCKCSFNQKPRAPGDE
EAQVENLITANATEPQKAEN

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FIGURE 3371

ATCCTGTCTGTCCGAACCCAGACACAAGTCTTCACTCCTTCTGCGAGCCCTGAGGAAGCCTTCTTTCCCCAGAC
ATGGCCAAACAAGGGTCCTTCCCTATGGCATGAGCCGCGAAGTGCAGTCCAAAATCGAGAAGAAGTATGACGAGGAG
CTGGAGGAGCGGCTGGTGGAGTGGATCATAGTGCAGTGTGGCCCTGATGTGGGCCGCCAGACCGTGGGCGCTTG
GGCTTCCAGGTCTGGCTGAAGAATGGCGTGATTCTGAGCAAGCTGGTGAACAGCCTGTACCCTGATGGCTCCAAG
CCGGTGAAGGTGCCCCGAGAACCCACCCTCCATGGTCTTCAAGCAGATGGAGCAGGTGGCTCAGTTCTGAAGGCG
GCTGAGGACTATGGGGTCATCAAGACTGACATGTTCCAGACTGTTGACCTCTTTGAAGGCAAAGACATGGCAGCA
GTGCAGAGGACCCTGATGGCTTTGGGCAGCTTGGCAGTGACCAAGAATGATGGGCACTACCGTGGAGATCCCAAC
TGGTTTATGAAGAAAGCGCAGGAGCATAAGAGGGAATTCACAGAGAGCCAGCTGCAGGAGGGAAAGCATGTCATT
GGCCTTCAGATGGGCAGCAACAGAGGGGCCTCCCAGGCCGGCATGACAGGCTACGGACGACCTCGGCAGATCATC
AGTTAGAGCGGAGAGGGCTAGCCCTGAGCCCGGCCCTCCCCAGCTCCTTGGCTGCAGCCATCCCGCTTAGCCTG
CCTCACCCACACCCGTGTGGTACCTTCAGCCCTGGCCAAGCTTTGAGGCTCTGTCACTGAGCAATGGTAACTGCA
CCTGGGCAGCTCCTCCCTGTGCCCCCAGCCTCAGCCCAACTTCTTACCCGAAAGCATCACTGCCTTGGCCCCCTCC
CTCCCGGCTGCCCCCATCACCTCTACTGTCTCCTCCCTGGGCTAAGCAGGGGAGAAGCGGGCTGGGGGTAGCCTG
GATGTGGGCCAAGTCCACTGTCCTCCTTGGCGGCAAAAGCCCATTAAGAAGAACCAGCCCAGCCTGCCCCCTAT
CTTGTCCTGGAATATTTTTGGGGTTGGAATC

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FIGURE 3372

MANKGPSYGMSREVQSKIEKKYDEELEERLVEWII VQCGPDVGRPDGRGLGFQVWLKNGVILSKLVNSLYPDGSK
PVKVPENPPSMVFKQMEQVAQFLKAAEDYGVIKTDMFQTVDLFEGKDMAAVQRTLMALGSLAVTKNDGHYRGDPN
WFMKKAQEHKREFTESQLQEGKHVIGLQMGSNRGASQAGMTGYGRPRQIIS

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FIGURE 3373

CCTTTCCGGCGGTGATGACCTACCCACACGAGAACATGCCTCTTGCAAAGGGTCTCCTTCATCCCTCTCCAGAAA
AGGAGAAGAGGAAACACAAGAAGAAACGCCTGGTGCAGAGCCCCAATTCCTGCTTCATGGATGTGAAATGCCCAG
GATGCTATAAAATCATCACGGTCTTTAGCCATGCACAAACGGTAGTTTTGTGTGTTGGCTGCTCCACTGTCCTCT
GCCAGCCTACAGGAGGAAAAGCAAGGCTTACAGAAGGATGTTCCCTTCAGGAGGAAGCAGCACTAAAAGCACTCTG
AATCAAGATGAGTGGGAAACCATCTCAATAAACACATTTTGGATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAATT

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FIGURE 3374

GACATGCTCAGCAACATGCCAGGCACAGCTGCAGGCTCCAGTGGGCGCGGCATCTCCATCAGCCCCAGTGCTGGT
CAGATGCAGATGCAGCACCGTACCAACCTGATGGCCACCCTCAGCTATGGGCACCGTCCCTTGTTCCAAGCAGCTG
AGTGCTGACAGTGCAGAGGCTCACAGCTTGAACGTGAATCGGTTCTCCCTGCTAACTACGACCAGGCGCATTTA
CACCCCCATCTGTTTTTCGGACCAGTCCCGGGGTTCCCCCAGCAGCTACAGCCCTTCAACAGGAGTGGGGTTCTCT
CCAACCCAAGCCCTGAAAGTCCCTCCACTTGACCAATTCCCCACCTTCCCTCCAGTGCACATCAGCAGCCGCCA
CACTATAACCACGTGGGCACTACAGCAGGCCCTGCTGTCTCCACGCGCCAGACTATACAAGACACCAGCAGGTA
CCCCACATCCTTCAAGGACTGCTTTCTCCCGGCATTGCTCACCGGCCACTCGGACATCCGGCTGCCCCCAACA
GAGTTTGCACAGCTCATTAAAGGCAGCAGCAACAACGGCAGCAGCAGCAACAGCAGCAACAGCAAGAATAC
CAGGAACTGTTTCAAGGCACATGAACCAAGGGGATGCGGGGAGTCTGGCTCCAGCCTTGGGGGACAGAGCATGACA
GAGCGCCAGGCTTTATCTTATCAAATGCTGACTCTTATCACCATCACACCAGCCCCCAGCATCTGCTACAAATC
AGGGCACAAGAATGTGTCTCACAGGCTTCCTCACCCACCCCGCCCCACGGGTATGCTCACCCAGCCGGCACTGATG
CATTGAGAGAGCATGGAGGAGGACTGCTCGTGTGAGGGGGCCAAGGATGGCTTCCAAGACAGTAAGAGTTCAAGT
ACATTGACCAAGGTTGCCATGACAGCCCTCTGCTCTTGAGTACCGGTGGACCTGGGGACCCCTGAATCTTTGCTA
GGAAGTGTGAGTCATGCCAAGAATTGGGGATACATCCCTATGGTCATCAGCCAACTGCTGCATTTCAGTAAAAAT
AAGGTGCCCAGCAGAGAGCCTGTATAGGGAAGTGCATGGATAGAAGTTCTCCAGGACAAGCAGTGGAGCTGCCG
GATCACAATGGGCTCGGGTACCCAGCACGCCCCCTCCGTCCATGAGCACCACAGGCCCCGGGGCCCTCCAGAGACAC
CACACGATCCAGAACAGCGACGATGCTTATGTACAGCTGGATAACTTGCCAGGAATGAGTCTCGTGGCTGGGAAA
GCACTTAGCTCTGCCCAGATGTGCGATGCAGTTCTCAGTCAGTCTTCGCTCATGGGCAGCCAGCAGTTTCAGGAT
GGGGAAAATGAGGAATGTGGGGCAAGCCTGGGAGGTCATGAGCACCACAGCCTGAGTGATGGCAGCCAGCATTTA
AACTCCTCTTGCTATCCATCTACGTGTATTACAGACATTCTGCTCAGCTACAAGCACCCCGAAGTCTCCTTCAGC
ATGGAGCAGGCAGGCGTGTAAACAAGAAACAGAGAGTTTTGTGTACAGCTTGGGAATGAAAAGGTTGATTGTAAAC
CCACAGTATCTAGCAGCGTTGTGCCAAATTGCCCTTGTTGTTCTCTCCACCCAAAATATCACAGCTGCTTTCTCTC
ACATTTGGTTTCATCCGTGTGCTGTTCTTTTGGGTTCTGAGAGGGTTTTGCCATGTTTGCTTGATGACCAAGTCA
CCAAGGAAATAAACAGGAAGGAAATCC

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FIGURE 3375

MLSNMPGTAAGSSGRGISISPSAGQMOMQHRTNLMATLSYGHRPLSKQLSADSAEAHSLNVNRFSPANYDQAH LH
PHLFSDQSRGSPSSYSPSTGVGFSPTQALKVPPLDQFPTFPPSAHQPPHYTTSALQQALLSPTPPDYTRHQQVP
HILQGLLSPRHSLTGHS DIRLPTEFAQLIKRQQQQRQQQQQQQQQQEYQELFRHMNQGDAGSLAPSLGGQSMTE
RQALSYQNADSYHHHTSPQHLLQIRAQECVSQASSPTPPHGYAHQPALMHSESMEEDCSCEGAKDGFQDSKSST
LTKGCHDSPLLLSTGGPGDPESLLGTVSHAQELGIHPYGHQPTAAFSKNKVPSREFVIGNCMDRSSPGQAVELPD
HNGLGYPARPSVHEHHRPRALQRHHTIQNSDDAYVQLDNLPGMSLVAGKALSSARMSDAVLSQSSLMGSQQFQDG
ENEECGASLGGHEHPDLSDGSQHLNSSCYPSTCITDILLSYKHPEVSFSMEQAGV

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FIGURE 3376

AGAGACTGCGAGAAGGAGGTCCCCACGGCCCTTCAGGATGAAAGCTGCGGTGCTGACCTTGGCCGTGCTCTTCC
TGACGGGGAGCCAGGCTCGGCATTTCTGGCAGCAAGATGAACCCCCCAGAGCCCCTGGGATCGAGTGAAGGACC
TGGCCACTGTGTACGTGGATGTGCTCAAAGACAGCGGCAGAGACTATGTGTCCAGTTTGAAGGCTCCGCCTTGG
GAAAACAGCTAAACCTAAAGCTCCTTGACAACCTGGGACAGCGTGACCTCCACCTTCAGCAAGCTGCGCGAACAGC
TCGGCCCTGTGACCCAGGAGTTCTGGGATAACCTGGAAAAGGAGACAGAGGGCCTGAGGCAGGAGATGAGCAAGG
ATCTGGAGGAGGTGAAGGCCAAGGTGCAGCCCTACCTGGACGACTTCCAGAAGAAGTGGCAGGAGGAGATGGAGC
TCTACCGCCAGAAGGTGGAGCCGCTGCGCGCAGAGCTCCAAGAGGGCGCGCGCCAGAAGCTGCACGAGCTGCAAG
AGAAGCTGAGCCCACTGGGCGAGGAGATGCGCGACCGCGCGCGCGCCCATGTGGACGCGCTGCGCACGCATCTGG
CCCCCTACAGCGACGAGCTGCGCCAGCGCTTGGCCGCGCGCCTTGAGGCTCTCAAGGAGAACGGCGGGCGCCAGAC
TGGCCGAGTACCACGCCAAGGCCACCGAGCATCTGAGCACGCTCAGCGAGAAGGCCAAGCCC GCGCTCGAGGACC
TCCGCCAAGGCCTGCTGCCCCGTGCTGGAGAGCTTCAAGGTCAGCTTCTGAGCGCTCTCGAGGAGTACACTAAGA
AGCTCAACACCCAGTGAGGGCGCCCGCCGCCGCCCCCTTCCCGGTGCTCAGAATAAACGTTTCCAAAGTGGG

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FIGURE 3377

MKAAVLTLAVLFLTGSQARHFWQQDEPPQSPWDRVKDLATVYVDVLKDSGRDYVSQFEGSALGKQLNLKLLDNWD
SVTSTFSKLREQLG PVTQEFWDNLEKETEGLRQEMSKDLEEVKAKVQPYLDDFQKKWQEEMELYRQKVEPLRAEL
QEGARQKLHELQEKLSPLGEEMRDRARAHVDAIRTHLAPYSDELQRQLAARLEALKENG GARLA EYHAKATEHLS
TLSEKAKPALEDLRQGLLPVLESFKVSFLSALEEYTKKLNTQ

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FIGURE 3378

CTGAATTGCGCGTGGTGGCCATCGCGGCCAGCGGGGCTGTGGAACCAGGGCCCCCGGGGGCTGCCGTGCCCCGT
CGCCCGCCCCGGCCCCGCGCCTGCCCTGATCACCTGTTCCGGCCCATCAGCGCCGAGGACGAGGAGCAGCAGC
CCACCGAGATCGAGTCGCTATGCACTGAACCTGTTACTGCAATGGCATGACGCGCCTCCTGCTCACCAAGATTCCCT
TCTTCAGAGAAATAATAGTGAGCTCCTTTTCTGCGAGCACTGTGGCTGGAACAACACGGAGATCCAGTCGGCAG
GCAGGATCCAGGACCAGGGAGTGCCTACACTTTGTCTGTGAGGGCTCTGGAGGACATGAACAGAGAAGTGGTGA
AGACTGACTCTGCTGCCACAAGGATTCCCTGAGCTAGATTTTGAATTCCTGCCTTTAGCCAGAAAGGAGCTCTGA
CCACTGTTGAAGGATTGATCACCCGTGCTATCTCTGGCCTGGAGCAGGACCAGCCTGCACGAAGGGCAAACAAAG
ATGCTACAGCTGAAAGAATTGATGAGTTCATTGTCAAACCTGAAGGAGCTAAAGCAAGTAGCCTCCCCCTTTCACTC
TGATCATTGATGATCCCTCAGGGAACAGTTTTGTGGAACCCACATGCTCCTCAGAAAGATGATGCCCTGGTGA
TCACACACTACAACCGGACCCGACAGCAGGAAGAGATGCTGGGGCTTCAAGAAGAAGCACCAGCAGAGAAGCCAG
AAGAGGAAGATCTCAGAAATGAAGTGCTCCAGTTCAGCACAACTGCCCAGAATGCAATGCCCCGCTCAGACCA
ACATGAAGCTAGTACAAATCCCTCACTTTAAGGAGGTTATCATCATGGCTACCAACTGCGAGAAGTGTGGGCATC
GGACCAATGAGGTGAAATCTGGAGGAGCAGTAGAACCTTGGGCACCAGGATCACCTCCACATCACAGATGCCT
CAGATATGACCAGAGACCTCCTCAAGTCTGAGACTTGCACTGTGGAATCCCAGAGCTAGAATTTGAACTGGGAA
TGGCAGTCCTCGGGGGCAAGTTCACCACACTGGAAGGGCTGCTGAAAGACATCCGGGAAGTGGTGACCAAAAATC
CTTTCACACTGGGCGACAGTTCCAATCCTGGACAGACGGAGAGACTACAGGAGTTTAGCCAGAAGATGGACCAGA
TCATCGAAGGTAACATGAAGGCCCACTTTATTATGGATGATCCAGCAGGAAACAGTTACTTGCAGAATGTGTATG
CGCCTGAAGATGATCCTGAGATGAAGGTGGAGCGTTACAAGCGCACCTTTGACCAAAATGAGGAGCTAGGGCTCA
ATGACATGAAGACAGAGGGCTATGAGGCAGGCCTGGCTCCGCAACGGTAGCAGTGGGTGGCTCAAGGGCCAGCCT
CCAGCGCTGCTCTTTCTGTAGGTTATTTATTAGTATTGGATGAAGGCCGAAGGCTGGGAGTGTCTTTCCCACCAGC
CCTTGCCCATGGTGGGGAGGACATCTGGTCTGAGTCAGAGATCTGTGCACACTTTCTAAACAGCTTGTGATGCAA
GTGTGAGCCTATTGTGTTACTTGACCTTATTTTGAAGTTTTGAATTGGCCTAGGAGGAAACCCAGAAATGAACC
AGGGGTATGTCATCACTTTTTTTCATATCAAGTCCTCACCTCCTCCACATAATGCTCTATCTCTAAGGTTGGA
ACTCTGAAGTTGGAGAAGGTGGAATAAAGTTACACCTGG

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FIGURE 3379

MAASGAVEPGPPGA AVAPSPAPAPPPAPDHLFRPISA EDEEQPTEIESLCMNCYCNGMTRLLLT KIPFFREIIV
SSFSCEHCGWNNTEIQSAGRIQDQGVRYTLSVRALED MNREVVKTD SAATRIPELD FEIPAFSQKGALT TVEGLI
TRAI SGLEQDQPARRANKDATAERIDEFIVKLKELKQVASPFTLIIDDP SGNSFVENPHAPQKDDALVITHYNRT
RQQEEM LGLQEEAPAEKPEEEDLRNEVLQFSTNCPECNAPAQT NMKLVQIPHFK EVIIMATNCENC GHR TNEVKS
GGAVEPLGTRITL HITDASDMTRDLLKSETCSVEIPELEFELGMAVLGGKFTTLEGLLKDIRELVTKNPF TLGDS
SNPGQTERLQEF SQKMDQII EGNMKAHFIMDDPAGNSYLQNVYAPEDDP EMKVERYKRTFDQNEELGLNDMKTEG
YEAGLAPQR

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FIGURE 3380

TGAACTCTGGATGCTGTTAGCCTGAGACTCAGGAAGACAACCTTCTGCAGGGTCACTCCCTGGCTTCTGGAGGAAA
GAGAAGGAGGGCAGTGCTCCAGTGGTACAGAAGTGAGACATAATGGAATCAGGCTTCACCTCCAAGGACACCTAT
CTAAGCCATTTTAACCCCTCGGGATTACCTAGAAAAATATTACAAGTTTGTTCTAGGCACTCTGCAGAAAGCCAG
ATTCTTAAGCACCTTCTGAAAAATCTTTTCAAGATATTCTGCCTAGACGGTGTGAAGGGAGACCTGCTGATTGAC
ATCGGCTCTGGCCCCACTATCTATCAGCTCCTCTCTGCTTGTGAATCCTTTAAGGAGATCGTCGTCACCTGACTAC
TCAGACCAGAACCTGCAGGAGCTGGAGAAGTGGCTGAAGAAAGAGCCAGAGGCCTTTGACTGGTCCCCAGTGGTG
ACCTATGTGTGTGATCTTGAAGGGAACAGAGTCAAGGGTCCAGAGAAGGAGGAGAAGTTGAGACAGGCGGTCAAG
CAGGTGCTGAAGTGTGATGTGACTCAGAGCCAGCCACTGGGGGCCGTCCCCTTACCCCCGGCTGACTGCGTGCTC
AGCACACTGTGTCTGGATGCCGCCTGCCAGACCTCCCCACCTACTGCAGGGCGCTCAGGAACCTCGGCAGCCTA
CTGAAGCCAGGGGGCTTCCTGGTGATCATGGATGCGCTCAAGAGCAGCTACTACATGATTGGTGAGCAGAAGTTC
TCCAGCCTCCCCCTGGGCCGGGAGGCAGTAGAGGCTGCTGTGAAAGAGGCTGGCTACACAATCGAATGTTTGAG
GTGATCTCGCAAAGTTATTCTTCCACCATGGCCAACAACGAAGGACTTTTCTCCCTGGTGGCGAGGAAGCTGAGC
AGACCCCTGTGATGCTGTGACCTCAATTAAAGCAATTCCTTTGACCTGTCA

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FIGURE 3381

MESGFTSKD TYLSHFNPRDYLEKYYKFGSRHSAESQILKHLKLNLFKIFCLDGVKGDLLIDIGSGPTIYQLLSAC
ESFKEIVVTDYSDQNLQELEKWLKKEPEAFDWSPVVTYVCDLEGNRVKGPKEKEEKLQAVKQVLKCDVTQSQPLG
AVPLPPADCVLSTLCLDAACPDLP TYCRALRNLGSLKPGGFLVIMDALKSSYYMIGEOKFSSLPLGREAVEAAV
KEAGYTIEWFEVISQSYSSTMANNEGLFSLVARKLSRPL

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FIGURE 3382

CAGATGCAGTTTTCTCCGCACGTGCGCGCCTTCTCTCCTTCCCGCCCTCAGGGTCCACGGCCACCATGGCGTATC
AGGGGCAGCAGTACCTGTGGCAGCATTGGCCTTTGCAGCGGCGGCAGCAGCACCAGGCTCTGCAGCGGCACCCCC
CAGCGGCTTAAGCCATGGCGCTTCTCAGGGCATTTCAGCAGCAGCGTTGCTGTAACCGACAAAGACACCTTCGAAT
TAAGCACATTCTCGATTCCAGCAAAGCACCGCAACATGACCGAAATGAGCTTCTGAGCAGCGAGGTATTGGTG
GGGGACTTGATGTCCCCCTTCGACCAGTCGGGTTTGGGGGCTGAAGAAAGCCTAGGTCTCTTAGATAACTACCTG
GAGGTGGCCAAGCACTTCAAACCTCATGGGTTCTCCAGGGACAAGGCTAAGGCGGGCTTCTCCGAATGGCTGGCT
GTGGATGGGTTAGGCAGTCCCTCCAATAACAGCAAGGAGGATGCCTTCTCCGGGACAGATTGGATGTTGGAGAAA
ATGGATTTGAAGGAGTTCGTCTTTGATGCCCTGTTGGGTATAGATAACCTGGAAACCATGCCAGATGAACTTTTG
ACCACCTTTGGATGACACTTGTGATCTCTTTGCCCCCTAGTCCAGGAGACTAATAAGGAGACCCCCAGACGGTGA

ACCCAATTGGCCATCTCCAGGAAGTTTAAACAAAACCCGACCAGGTTGCCCCCTTCACCTTCTTGCAACCTCTTC
CCCTTTCCCCAGGGGTCCTGTCTCCACTCCAGGTCATTCTTTAGTTTAGAGCTGGGCAGTGAAGTGGATATCC
TGAAGGAGATAGGAAGCCAGACTCCACTGCTTACGTTGCCATGATCCCTCAGTGCATAAAGGAGGAAGACACCCC
TTCAGATAATGATAGTGGCATCTGTATGAGCCCAGAGTCCTATCTAGGGTCTCCTCAGCATAGCCCCCTCTACCAG
GGGCTCTCCAAATAGGAGCCTCCCATCTCCAGGTGTTCTCTGTGGGTCTGCCCCCCCCAAACCTTACAATCCTCC
TGGAGAGACGATGGTAGCAGCAAAAGTAAAGGGTGAGAACTGGATAAGAAGTTGAAAAAATGGAGTAAAACAA
GACAGCAGCCACTGGGTACCGCCAGAAGAAGAGGGTGGAGCAGGAGGCTCTCACTGGTGAGTGCAAAGAGCTGGA
AAAGAAGAACGAGGCTCTAAAAGAGAGGGCGGATTCCCTGGCCAAGGAGATCCAGTACCTGAAAGATTTGATAGA
AGAGGTCCGCAAGACAAGGGGAAGAAAAGGGTCCCTAGTTGACGGTAGTCAGGAGCGTCAATGTGCTTGATACA
TGGAGCCTCTGCTGTAGCTGTGTGTTCCAATAAATTATTTGTAGGG

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FIGURE 3383

MTEMSFLSSEVLVGDLMSPFQSGLGAEESLGLLDNYLEVAKHFKPHGFSRDKAKAGFSEWLAVDGLGSPSNNSK
EDAFSGTDWMLEKMDLKEFVFDALLGIDNLETMPDELLTTLDDTCDLFAPLVQETNKETPRR

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FIGURE 3384

GGCAGCCGTCCGGGGCCGCCACTCTCCTCGGCCGGTCCCTGGCTCCCGGAGGCGGCCGCGCGTGGATGCGGCGGG
AGCTGGAAGCCTCAAGCAGCCGGCGCCGTCTCTGCCCCGGGGCGCCCTATGGCTTGAAGAGCCTGGCCACCCAGT
GGCTCCACCGCCCTGATGGATCCACTGAATCTGTCTGGTATGATGATGATCTGGAGAGGCAGAACTGGAGCCGG
CCCTTCAACGGGTGACAGCGGGAAGGCGGACAGACCCCACTACAATACTATGCCACACTGCTCACCCTGCTCATC
GCTGTATCGTCTTCGGCAACGTGCTGGTGTGCATGGCTGTGTCCCGGAGAAGGCGCTGCAGACCACCACCAAC
TACCTGATCGTCAGCCTCGCAGTGGCCGACCTCCTCGTGCCACACTGGTCATGCCCTGGGTGTCTACCTGGAG
GTGGTAGGTGAGTGGAAATTCAGCAGGATTCACTGTGACATCTTCGTCACTCTGGACGTGATGATGTGCACGGCG
AGCATCCTGAACTTGTGTGCCATCAGCATCGACAGGTACACAGCTGTGGCCATGCCCATGCTGTACAATACGCGC
TACAGCTCCAAGCGCCGGGTACCGTCATGATCTCCATCGTCTGGGTCTGTCTTACCATCTCCTGCCCACTC
CTCTTCGGACTCAATAACGCAGACCAGAACGAGTGCATCATTGCCAACCCGGCCTTCGTGGTCTACTCCTCCATC
GTCTCCTTCTACGTGCCCTTCATTGTCAACCCTGCTGGTCTACATCAAGATCTACATTGTCTCCGAGACGCCGC
AAGCGAGTCAACACCAACGCAGCAGCCGAGCTTTCAGGGCCCACTGAGGGCTCCACTAAAGGGCAACTGTACT
CACCCCGAGGACATGAACTCTGCACCGTTATCATGAAGTCTAATGGGAGTTTCCAGTGAACAGGCGGAGAGTG
GAGGTGCCCCGGCGAGCCAGGAGCTGGAGATGGAGATGCTCTCCAGCACCAGCCACCCGAGAGGACCCGGTAC
AGCCCCATCCACCCAGCCACCACCAGCTGACTCTCCCCGACCCGTCCACCATGGTCTCCACAGCACTCCCGAC
AGCCCCGCCAAACCAGAGAAGAATGGGCATGCCAAAGACCACCCCAAGATTGCCAAGATCTTTGAGATCCAGACC
ATGCCCAATGGCAAAACCCGGACCTCCCTCAAGACCATGAGCCGTAGGAAGCTCTCCAGCAGAAGGAGAAGAAA
GCCACTCAGATGCTCGCCATTGTTCTCGGCGTGTTCATCATCTGCTGGCTGCCCTTCTTCATCACACACATCCTG
AACATACACTGTGACTGCAACATCCCGCCTGTCTGTACAGCGCCTTCACGTGGCTGGGCTATGTCAACAGCGCC
GTGAACCCCATCATCTACACCACCTTCAACATTGAGTTCCGCAAGGCCTTCCTGAAGATCCTCCACTGCTGACTC
TGCTGCCTGCCCCGACAGCAGCCTGCTTCCACCTCCCTGCCCAGGCCGGCCAGCCTCACCTTGCGAACCGTGA
GCAGGAAGGCCTGGGTGGATCGGCCTCCTTTCACCCCGGCAGGCCCTGCAGTGTTTCGCTTGGCTCCATGCTCCT
CACTGCCCCGACACCCTCACTCTGCCAGGGCAGTGCTAGTGAGCTGGGCATGGTACCAGCCCTGGGGCTGGGCC
CCCAGCTCAGGGGCAGCTCATAGAGTCCCCCTCCACCTCCAGTCCCCCTATCCTTGGCACCAAGATGCAGCC
GCCTTCCTTGACCTTCCTCTGGGGCTCTAGGGTTGCTGGAGCCTGAGTCAGGGCCAGAGGCTGAGTTTTCTCTT
TGTGGGGCTTGGCGTGGAGCAGGCGGTGGGGAGAGATGGACAGTTACACCCCTGCAAGGCCCACAGGAGGCAAGC
AAGCTCTCTTGCCGAGGAGCCAGGCAACTTCAGTCCCTGGGAGACCCATGTAAATACCAGACTGCAGGTTGGACCC
CAGAGATTCCCAAGCCAAAACCTTAGCTCCCTCCCGCACCCCGATGTGGACCTCTACTTTCCAGGCTAGTCCGG
ACCCACCTCACCCCGTTACAGCTCCCCAAGTGGTTTCCACATGCTCTGAGAAGAGGAGCCCTCATCTTGAAGGGC
CCAGGAGGGTCTATGGGGAGAGGAACCTTGGCCTAGCCCAACCTGCTGCCTTCTGACGGCCCTGCAATGTATC
CCTTCTCACAGCACATGCTGGCCAGCCTGGGGCCTGGCAGGGAGGTCAGGCCCTGGAACCTCTATCTGGGCCTGGG
CTAGGGGACATCAGAGGTTCTTTGAGGGACTGCCTCTGCCACACTCTGACGCAAAACCACTTTCCTTTTCTATT
CTTCTGGCCTTTCCTCTCTCCTGTTTCCCTTCCCTTCCACTGCCTCTGCCTTAGAGGAGCCACGGCTAAGAGGC
TGCTGAAAACCATCTGGCCTGGCCTGGCCCTGCCCTGAGGAAGGAGGGGAAGCTGCAGCTTGGGAGAGCCCTGG
GGCCTAGACTCTGTAACATCACTATCCATGCACCAAACTAATAAACTTTGACGAGTCACCTTCCAGGACCCCTG
GGTAAAAAAAAAAAAA

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FIGURE 3385

MDPLNLSWYDDDLERQNWSRPFNGSDGKADRPYNYATLLTLLIAVIVFGNVLVCMASREKALQTTTNYLIVS
LAVADLLVATLVMPWVYLEVVGWKFSSRIHCDIFVTLDVMMCTASILNLCAISIDRYTAVAMPMLYNTRYSSKR
RVTVMISIVWVLSFTISCPLLFGLNNADQNECIANPAFVYSSIVSFYVFFIVTLLVYIKIYIVLRRRRKRVNT
KRSSRAFRAHLRAPLKGNCTHPEDMKLCTVIMKSNGSFVNRRRVEAARRAQELEMELSSSTSPPERTRYSPIPP
SHHQLTLPDP SHHGLHSTPDSPAKPEKNGHAKDHPKIAKIFEIQTMPNGKTRTSLKTMSRRKLSQQKEKKATQML
AIVLGVFIICWLPFFITHILNIHDCNIPPVLYSAFTWLGYVNSAVNP IYTTFNIEFRKAFLKILHC

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FIGURE 3386

GATGCTGATAAAGAGAAAGATTTCGAGAAATTTCTTAAAAATGTGGATGAAATCTCCAATTTAATTCAGGAGATG

AATTCTGATGACCCAGTTGTGCAACAGAAAGCTGTCTGGAGACAGAAAAGAGACTACTGCTTATGGAGGAAGAC
CAGGAGGAGGATGAATGCAGGACCACCTTGAACAAGACTATGATCAGTCCTCCACAACTGCTATGAAGAGTGCA
GAAGAAATAAACTCAGAGGCCCTTCTTGGCATCTGTGGAGAAGGATGCAAAGGAACGAGCCAAGAGAAGAAGGGAA
AACAAAGTCTTGGCGGATGCCCTAAAAGAAAAAGGAATGAAGCATTGCTGAAGGCAATTATGAAACAGCTATC
CTGCGCTACAGTGAGGGTTTGGAGAAGCTGAAGGACATGAAAGTGCTGTACACCAACCGAGCCAGGCTTATATG
AACTTGAGGACTATGAGAAGGCACTGGTGGATTGTGAGTGGGCTCTCAAGTGTGATGAAAAATGCACAAAAGCA
TATTTTCACATGGGAAAAGCCAACCTGGCCCTGAAGAACTACAGTGTGTCTAGAGAGTGTTATAAGAAGATCTTA
GAAATAAACCCCAAGCTGCAAACCCAGGTGAAAGGTTACCTGAATCAAGTAGATCTTCAGGAAAAAGCAGACCTT
CAAGAAAAGGAAGCCACGAACCTGCTGGATTGAGGAAAGAACACAGCCGTGACCACCAAGAACCTCCTGGAGACC
CTTTCCAAGCCTGACCAGATCCCTTGTCTATGCTGGGGGGATTGAGATCCTGACTGAAATGATAAATGAGTGC
ACAGAACAACTTTATTGAGAATGCACAATGGATTAGTATCATCAGTGACAACGAGGTCATAAGAAGGTGTTTT
TCCACAGCAGGAAATGATGCAGTTGAAGAAATGGTCTGTGTCTGTTCTCAAGCTCTGGCAAGCAGTGTGCAGC
AGGAACGAGGAAAACAGCGTGTGCTAGTGATACCATGACAGGGCCAGGCTGTTGGCCGCCCTCTTGTCTCTCC
AAGGTCTTGGCCATCCGGCAGCAGAGCTATGCCCTGCTGCTGCATCTCGCCAGACTGAGAGCGGACGGAGCCTG
ATCATCAACCACCTTGACCTGACCAGATTATTGGAAGCGCTGGTGTGCTTCTTGATTCTCGGATAAGGAGGCC
AACACTGCTATGGGACTGTTACAGACTTGGCTCTGGAAGAAAGATTCCAAGTCTGGTTCCAGGCCAACCTTCCA
GGTGTCTCTCCCTGCACTCACAGGCGTTCTGAAGACAGATCCCAAGGTAAGCAGCTCCTCGGCTCTGTGCCAGTGC
ATTGCCATCATGGGAAACCTCAGTGTGAGCCCACTACCCGAAGACACATGGCGGCTGTGAGGAATTTGGGGAT
GGCTGCTTGAGCCTCCTGGCCAGGTGTGAGGAGGATGTGGACCTGTTGAGAGGTTATCTACACACTCCTGGGA
CTCATGATGAACCTGTGTCTTCAGGCTCCCTTTGTCTCTGAGGTTTGGGCTGTGGAGGTGAGCAGAAGGTGCCTG
TCTTTACTAAACAGCCAGGATGGAGGAATCCTGACAAGAGCTGCTGGTGTCTGAGCCGGACCCCTTCTTCTCTCT
CTGAAAATTGTTGAGGAGGCCTTGCGAGCAGGAGTGGTAAAGAAAATGATGAAATTCCTGAAGACAGGAGGTGAG
ACTGCATCACGTTATGCTATAAAGATACTAGCTATCTGCACGAATAGTTATCATGAAGCTCGGGAAGAAGTAATA
AGACTGGATAAAAAGTTGAGCGTTATGATGAAGCTGCTCAGCTCGGAGGATGAGGTCTGGTGGGCAACGCTGCC
CTCTGCCTTGGTAACTGCATGGAGGTGCCAACGTTGCGTCTTCCCTGCTAAAGACGGACCTTTTGGGGTCTTG
TTAAAGCTTGCAAGCAGTGACACACAGAAGACGGCCGTGCAGGTGAACGCAGGCATTGCTCTGGGGAAGCTGTGC
ACAGCTGAGCCCAGATTGCTGCTCAACTGAGAAAGCTTCATGGCCTAGAAATCTCAACTCTACGATGAAATAC
ATCAGTGATTCTTGAGAGAGACAGGGTTTGTGTGCATTGGGGAACACACAGATGCACACCGTGTGTTGTTCTTA
TGCTAATAAAGACCTTTGATGTATCCACTTCAAAAAAAAAAAAAAAAAA

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FIGURE 3387

MNSDDPVVQQKAVLETEKRLLLLMEEDQEEDCRTTLNKTMISPPQTAMKSAEEINSEAF LASVEKDAKERAKRRR
ENKVLADALKEKGNEAFAEGNYETAILRYSEGLEKLKDMKVLYTNRAQAYMKLEDYEKALVDCEWALKCDEKCTK
AYFHMGMKANLALKNYSVSRECYKKILEINPKLQTQVKGYNQVDLQEKADLQEKAEHELDSGKNTAVTTKNLLE
TLSPDQIPLFYAGGIEILTEMINECTEQTLFRMHNGFSIISDNEVIRRCFSTAGNDAVEEMVCVSVLKLWQAVC
SRNEENQRVLVIIHHDRAALLSSKVLAIQQSYALLHLAQTESGRSLIINHLDLTRLLEALVSFLDFSDKE
ANTAMGLFTDLALEERFQVWFQANLPGVLPALTGVLTDPKVSSSSALCQCIAMGNLSAEPTRRHMAACEEFG
DGCLSLARCEEDVDLFRVITYLLGLMMNLCQAPFVSEVWAVEVSRCLSLNSQDGGILTRAAGVLSRTLSS
SLKIVEEALRAGVVKKMMKFLKTGETASRYAIKILAICTNSYHEAREEVIRLDKKLSVMMKLLSSEDEVLVGNA
ALCLGNCMEVPNVASSLLKTDLLRVLLKLAGSDTQKTAVQVNAGIALGKLCTAEPRFAAQLRKLHGLEILNSTMK
YISDS

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FIGURE 3388

AAATATT CAGGAAACAAAAATCACTCAAACGGAATCGAAGCCTTTTAAACAAAGAAAATGAAATACAGATGATGAT
GATGATGATGAAGATGATGCTAAGTAAACAGAAATCAGTACTCCGCATGCGCTCCTCTCCTAAGGTACAAAGCAG
CAAGAGGTTAGGGTGGCAAGGCTGCCTCTGGGTCCATTCTGTGGGCCACTCTCCCCAACGTTCTGACACTTCTGC
AGTCTGATCAGTGGCGATGCTAGATTATAATTTCAAACCTGTGAAGAATAATGGTCTTGCTCAATGTGG
GGTTATGTTGCATTTTCTCAGCTCCTGGGGATGGAAATGGAGGATCCAGAACACACAGCCCTGGCCCTTTGAT
TCTAGGGCCTGCACAGATCTCTGGTTCAAATGCACAGGCCCTCAGAATAGAGGAACATGAAGAGAGATCTTAGAG
CACACAGTAGAATGTGAGAGCCTGGGTGTCTGAGACCGGGAGGGCCCAGCAGTGAGGGGCAGGCTCTTCTGGTCA
CCAGGCTGTT CAGTGGACTCAGTTCTTCATCTTGTAATGTCGATGGCTTTGCCACACCAGGCCAAGCCCATGCCA
TACCTTGTC AAGACTGTCAAAGTGTTGTGGTTAGGTCAAACCTGGTTTTGGTTCTGATGGTTAGGAAGAAACAGG
TCAGCCCTCAGATCACCTGGCCCGGGACAGCTGACCCCTAGAACCCTGGCTCTGCCATTAGCTAGGACCTAAGA
CTCTGCCACATTTTGGTCTGTTCTCTCCATTACACATAGGTTTGTCTCAGCATGCAAGAGTTTTTCCTTTAAA
AAAAAAAAAAAAAAAAAAAAAAAAAGCAATGCTTTCTCTAAAATCAAAGAGGGAGTCATTTTATTCCAAGATGTTT
TATCTTTTATGTTAAGAGATCAAAGCTTATAATTTCTTTTTTAATTTTTGAAGGAGGGATCAACTCCAGTTTCC
AATGTCTATGTGTCTATGTGTGTATGTGCCATACATATGTATTACATGAAGACCGGCATGGCCAAGTTCTGCTG
GAGGAGCACTCAAGTGTGACGAGCAGGGCCACTGGACCCTGCAGGGCTGTGGTGTATATAGTGCAGCTTTGGAGG
TGGAACCTCTATTTTCACTTTTCTATGGAGCCTTCCGAGTCCCAGGTTTTCACTTGAGGCTGTCTGTCTGGATG
GCGGTTTT CAGACCTCCATTAACATCCCTACCCAGCATTCTGTACTTCGGGGGCCTTCTCTCTTGTTATAAACT
TTTTACCAAGTGAACATCGATACCACCTTTGTTTCCATTCTCACTGGTGTAATACTGAGTACTAACTGAGAAT
TTTGACTTTGCATTCTGTGCGAATACTTGTGTTCAATAAAAATTG

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FIGURE 3389

MCVCAIHMYSHEDRHGQVLL EEHSSVTSRATGPCRAVVYIVQLWRWNSIFTLFYGAFRVPGFHLRLSVWMAVFRP
PLTSLPSILYFGLLSCYKTFYQVKHRYHLCFHSWCKY

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FIGURE 3390

CCAGGAACGAGATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGGCGGTGCCCTAGGAGGCCGAGCTCTGTTGCTTC
GAACTCCAGTGGTCAGACCTGCTCATATCTCAGCATTTCCTCAGGACCGACCTATCCCAGAATGGTGTGGAGTGC
AGCACATACACTTGTACCGAGCCACCATTCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGGGTTG
TCAGTGTTTTGCTCCTGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGATGGACTATTCCCTGGCTG
CAGCCCTCACTCTTCATGGTCACCTGGGGCCTTGGACAAGTTGTTACTGACTATGTTTCATGGGGATGCCTTGCAGA
AAGCTGCCAAGGCAGGGCTTTTGGCACTTTCAGCTTTAACCTTTGCTGGGCTTTGCTATTTCAACTATCACGATG
TGGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCTTTTGACTTCATACTTTGAAGAATTGATGTA
TGCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAAGGAAGAAATAACAGATAAGTCCATTGGTGGA
CAGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAAATTTAATCTTTGAGGAAAAGGTTTGAGAGGAATTATATC
TAAGTTGTGAGACTGAGTTCTATATTCTGGTGAGTTAATGGGGTTGCCTCCAGCTTCTTATAAGACTCACAGTA
TAACTAAACATGATATATCAGCTTTTGCCTTTCAATTTATCAATCTCTTAAAGAGAATCCAACCTTTATTACGATT
AGTATATGATCAAACCTCCATATTTGCCTTGGGAATAATGGACAAAGGGAATACTCTTAATTCATGAATAAAAA
CTTTCAGAAAAATTAGACAGTGTTTAATTTTCGAAAACCTCCCTCTCTAGACAGTAGATAACCACCTACTGATGGT
TACATATACTAGGGAAATTTTAAAATTAGGAAATGCTGATAGCTCATATTATAAATTTCTAAATCCTAGGAAGAA
ACGCTTGGAGTGCTTCTGAATATACAGAAGTTCATTTAAGGGCAAGTTTCCCCGTAGATGTATCAAATACTAC
CAACTGTAAATTGAGATTTAATTCCCAAATGTATTCTACTTGTCTAAAACAATCTGTCCACAAATATAAACTA
TAAGTAATAAATTGTTATTTTCGCACAATGGGAATCTCTAATGTGAAAATGTATTCTATGAAAATAATTTTTTAA
ATAAAATGTTATATAATAAAAGTGTCTTCTATGCTTTT

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FIGURE 3391

MAVLWRLSAVCGALGGRALLLRTPVVRPAHISAFIQDRPIPEWCGVQHIHLSPSHHSGSKAASLHWTSERVSVL
LLGLLPAAAYLNPCSAMDYSLAAALTLHGHWGLGQVVTDYVHGDALQKAAKAGLLALSALTFAGLCYFNYHDVGIC
KAVAMLWKL

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FIGURE 3392

CCGTGAGTCTGACCTTAGGTGTCTCGTGTCTGGGGTTGATCCGAGCTGTGCGCCGCCGCCGCCGCAATGGGCAAAA
CGGCCAACTCTCCGGGTTCCGGGAGCCCGACCCGACCCGGTGCGGAGCTTCAATCGCTGGAAGAAAAAACACAGCC
ATAGGCAGAACAAAAAGAAGCAGTTGAGGAAGCAACTGAAGAAACCCGAATGGCAGGTGAGCGCGAGAGTATCA
GCCGCCTCATGCAGAACTATGAAAAGATAAATGTAAATGAAATCACAAGATTTTCAGATTTTCCCTTGTCCAAAA
AAACATTGAAAGGTTTGAAGAAGCTCAGTACCGTTTGGTGACTGAGATACAGAAGCAGACCATTGGATTGGCTT
TGCAAGGTAAAGATGTACTTGGAGCGGCCAAAACCTGGATCTGGCAAGACTCTGGCTTTTCTTGTTCAGTGCTGG
AAGCCTTATATCGTCTGCAATGGACTTCAACAGATGGGCTGGGGGTTCATAATATCACCTACGAGAGAAGCTGG
CCTATCAGACCTTTGAGGTTCTCCGAAAAGTAGGAAAGAATCATGACTTCTCAGCTGGTCTCATCATTGGTGGAA
AGGATCTAAAACACGAAGCTGAGAGGATCAACAACATAAATATACTCGTGTGCACACCAGGTCCGGCTTCTTCAAC
ACATGGATGAAACAGTATCTTTTCATGCTACCGACCTCCAAATGTTAGTTCTTGATGAAGCAGATAGAATCTTGG
ATATGGGCTTTGCTGATACCATGAATGCTGTTATTGAAAATCTCCCCAAGAAACGTCAGACTTTACTTTTCTCAG
CAACACAACTAAATCTGTAAAGGACCTTGACGCTTGAGTTGAAAAACCTGAGTATGTCTGGGTTTCATGAAA
AAGCAAAATATAGCACCCCTGCCACTTTGGAACAGAAGTACATAGTCTGTGAGCTGCAGCAAAAAATAAGTGTGC
TGTATTCTTTTTGAGAAGCCATCTGAAGAAGAAGAGCATTGTATTTTTTCCAGTTGCAAAAGAGGTCCAGTATC
TGTACCGAGTGTTTTGCCGGCTACGTCTGGTGTCTTATCTTGCCTCCATGGTGCACAGCAGCAAAATGAGAA
GAATGGAAGTCTATAATGAGTTTGTCCGTAAGAGAGCTGCAGTACTCTTGTCTACTGATATTGCAGCCAGGGGTC
TGGATTTCCCGGCCGTGAATTGGGTTCTTCAGTTTGATTGTCTGAGGATGCCAACACATATATTACAGAGCAG
GTAGAAGTCCAGGTACAAAGAGGATGGTGAAGCTTTGCTAATTTTGTCTACCTCAGAAAAAGCTATGGTGCAGC
AGCTTCTTCAGAAGAAAGTACCTGTGAAGGAAATCAAAATCAATCCAGAAAACTTATAGATGTCCAGAAAAAAT
TGGAATCTATTTTAGCTCAAGATCAAGATTTAAAAGAAAGAGCTCAAAGGTGTTTCGTCTCCTATGTACGATCTG
TATATCTGATGAAGGATAAAGAAGTATTTGATGTGAGCAAGTTACCTATACCTGAATATGCCCTGTCTCTTGGTC
TTGCTGTGGCACCACGCGTAAGATTTCTTCAGAAAATGCAGAAACACCCACCAAGAAATTGGTAAGGAGCCAAG
CCGATAAAGTAATTGAGCCAAGGGCTCCCTCCCTCACCAATGACGAAGTGGAGAATTTAGAGCCTACTTCAATG
AGAAAATGTCCATCCTTCAAAAAGGTGGAAAAAGACTCGAAGGGACAGAGCACAGACAGGATAATGATACTGGTA
ATGAAGAACAGGAAGAAGAAGAAGACGATGAAGAAGAAATGGAAGAGAACTGGCAAAAGCAAAAGGATCTCAAG
CCCCATCTCTTCTTAACACCAGTGAGGCACAGAAGATCAAGGAAGTTCTACACAGTTCTTGGACAGAGATGAGG
AGGAAGAAGATGCTGATTTCTTGAAGGTGAAGCGGCATAATGTGTTTGGATTGGACCTTAAAGACGAGAAAAAT
TACAGAAGAAAGAACCTTCTAAATCCAGCATCAAGAAAAAATGACCAGTTGCAGAAGCAAAAAAGTAATGA
AGAGAAATTTTAAAGTGAATAAGAAGATAACATTTACTGATGAAGGGGAGTTGGTTCAGCAGTGCCCAAAATGC
AGAAATCTGCCATCAAGGATGCTGAGGAAGATGATGACACAGGTGGTATCAACTTACATAAAGCAAGGAAAGAC
TTCAGGAAGAGGACAAATTTGACAAAGAAGAATATAGGAAAAAATTAAGGCAAAGCATCGGGAGAAAAGACTGA
AAGAAAGGGAAGCCAGAAGAGAAGCAACAAGAGACAAGCAAAGGCCAAAGATGAAGAGGAAGCCTTTCTGGATT
GGAGTGAT
CTGAAGATTGAGATAGTGAAGATATGGAAAAATAAATAAGTGATACCAAGAAGAAGCAGGGGATGAAGAAGAGGA
GCAACAGTGAAGTGAAGACGTGGGACCAACAAGTCATAACAGAAAGAAGGCCAGGTGGGACACTTTAGAGCCTT
TGGATACCGGCCTGTCTTTAGCAGAGGATGAAGAGCTGGTGTGTACATCTGCTAAGAAGTCAAAGCTAAATACTTC
CTGCGCCTGCCTTCTCCTTGAAACCTTGGTTATGACTGCGTAGGCAAGAAGTTGAAAAACAGTTGATTTGGGGGC
ACTTAGGTACCATATGCCCCATTCCCAAAGGGCACATTTCTGGATAGAAGCGATCGTATCTCCAAGTCCCTCTCA
CAGGACATGCTTTGTGCCATCACTGAGCATCTCAGATCGAGGGTGGATGATACCATTTCTGACCCCGTTTTCC
AGCATGTGTTCTGTAGATTTTATCCATGGGTTCTACGCCTTGTCTATTGGAACACTGCCTTTGTCTTACTGG
CAAGTTCTGGAGCTCTTGTGTCATTGTTAGAAATCCCTGTCTTGTCTTACTGTACAGAAGTTTCTGTTGCTGTAA
AATTGCTCATGATTTGACGTATTTAATATTTTCAAAGAGACTATGATGGACCAGCCCTGAGAAAAGAAATGAGTAT
TTTTGAATTGAGATGATCAATAATAAACATATTTCTATAAAAAAAAAAAAAA

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FIGURE 3393

MGKTANSPGSGARPDVRSFNRWKKKHSRQNKKKQLRKQLKKPEWQVERESISRLMONEYKINVNEITRFSDFP
LSKKTLLKGLQEAQYRLVTEIQKQTIGLALQGKDVLGAAKTGSGKTLAFLVPVLEALYRLQWTSTDGLGVLIISPT
RELAYQTFEVLRKVGKNHDFSAGLIIGGKDLKHEAERINNINILVCTPGRLLQHMDETVSFHDATDLQMLVLDEAD
RILDMGFADTMNAVIENLPKKRQTLLFSATQTKSVKDLARLSLKNPEYVWVHEKAKYSTPATLEQNYIVCELQOK
ISVLYSFLRSHLKKKSIVFFSSCKEVQYLYRVFCRLRPGVSILALHGRQQMRMEVYNEFVRKRAAVLFATDIA
ARGLDFPAVNWVLQFDCPEDANTYIHRAGRTARYKEDGEALLIILLPSEKAMVQQLQKKVPVKEIKINPEKLIDV
QKKLESILAQDQDLKERAQRCFVSYSVYLMKDKEVFDVSKLP IPEYALSLGLAVAPRVRFLOKMQKQPTKELV
RSQADKVIEPRAPSLTNDEVEEFRAVFNEKMSILQGGKRLEGTEHRQDNDTGNEEQEEEDDEEEMEELAKAK
GSQAPSLPNTSEAQKIKEVPTQFLDRDEEEDADFLKVKRHNVFGLDLKDEKTLQKKEPSKSSIKKKMTKVAEAK
KVMKRNFKVNKKITFTDEGELVQQWPQMOKSAIKDAEEDDDTGGINLHKAKERLQEDKFDKEEYRKKIKAKHRE
KRLKEREAREANKRQAKAKDEEEAFLDWSDDDDDDGDFPSTLPDPDKYRSEDSDSEDMENKISDTKKKQGM
KKRSNSEVEDVGPTSHNRKKARWDTLEPLDTGLSLAEDEELVLHLLRSQS

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FIGURE 3394

ATTTCAGTAAACCACTGGGAGTCCGGCAGCATGAAGGCAGCGCGCCCTCCCATGACTGCAGGGAAGTTCATGGTGG
TCGGCGGCGGCATCGCGGGCGTCACCTTGTGCGGAGCAGTTGGCTACTCACTTTCCATCAGAAGATATTCTCTTGG
TAACAGCTTCTCCTGTTATGAAAGCAGTTACAAATTTCAAGCAGATTTCTAAAAATTGGAAGAATTTGATGTTG
AAGAACAATCAAGTACCATGTTAGAAAAACGCTTTCCCAACATCAAGGTTATAGAATCTGGCGTAAAGCAACTGA
AGAGTGAAGAACTGCATTGTAACAGAAGATGGCAATCAGCATGTATATAAGAACTCTGTGTGCTGGAGCTAA
ACCAAAGTTGATATGTGAAGGAAATCCTTATGTATTAGGAATCCGTGATACAGACAGTGCTCAGGAATTTTCAGAA
ACAGCTTACTAAAGCTAAAAGAATAATGATCTTAGGGAACGGTGGTATCGCACTTGAGTTAGTGTATGAAATTGA
AGGCTGTGAAGTGATTTGGGCCATTAAAGATAAAGCTATAGGGAATACTTTCTTCGATGCAGGAGCAGCTGAATT
CTTGACTTCAAAGCTCATTGCTGAAAAATCAGAGGCTAAAATGTCATATAAAAGAACCAGATATACAACCTGAAGG
AAGGAAAAAGGAAGCTAGAAGCAAATCTAAATCAGATAATGTAGGCAGTGCCTTGGGACCAGATTGGCATGAAGG
CTTGAATCTTAAAGGAACAAAAGAGTTTTCTCATAAGATTACCTTGAAGCTATGTGTGAAGTAAAGAAAAATCTA
CCTTCAGGATGAGTTTAGAATTTTGAAGAAAAAGTCTTCACTTTTCCAAGAGACCATACGTCAGTTACAACATAA
TACAGAGATGTGGCCTGTCTATGTGGAATTGACCAATGAAAAGATATATGGCTGCGATTTCATTGTGCTGCTAC
AGGAGTTACACCGAATATAGAACCCTTTTCTCCATGGTAACAGTTTGTATCTAGGAGAAGATGGTGGCCTGAAAGT
GGATGATCATATGCACACATCCCTTCCTGATATCTATGCTGCCGGTGACATCTGTACTACATCCTGGCAGCTGAG
CCCAGTCTGGCAGCAGATGAGGCTGTGGACCCAGGCTAGACAGATGGGATGGTATGCAGCAAAGTGCATGGCTGC
AGCGAGTTCAGGAGACTCTATTGACATGGATTTTCACTTTGAACTGTTTGTCTCATGTGACAAAATTTTTTAACTA
TAAGGTTGTACTGCTGGGAAAATACAATGCACAGGGCTTAGGTTGAGATCATGAATTAATGCTGAGATGTACCAA
AGGACAAGAATACATCAAAGTCGTATGCAAATGGACGAATGATGGGAGCTTTCTTAATTGGTGAAACTGATTT
AGAAGAAACATTTGAAAACCTAATCTTAAACCAAATGAATCTTTCATCATATGGAGAAGATCTGCTAGATCCAAA
TATTGATATAGAAGATTATTTTGAATAAAATGGAATTTCTTCAAGAATCATATAAAGTTCCAAATGACACCAGA
AAAATCACAAGTCAATAAAATGAATGACTGTATTGAGTTAATGATGACCACACTGAAAAATTACAGAAGTGATAAT
GATATTAGTGAAAAATATAAAAACATAAATTCTAAGTTTGAATCAGTTCAAAGTTTATTTATAGATATATCTT
TCCAATACAACACTGACCACTTGGATAAAAATCTTAAGTTATTTATTTCTGTGTTTTAAACATAAAATATGTTTAC
TTGTGATTTAGCTTTGGAGCAAATTTAGGTAAGTTATCTATTTAGCCAAATGTACTCTAGTAGATTAGAACCATT
CTTTGTGAAATGTCAAATATGGCTGTGGTTTCAGGAACCTTAAATCGGTTGTATTTTACTTTAAATAGAGATG
TAGCAATATCTCGTTTGCTAATATTTATATTGATGACTTACTCCTTTTTTGTGAATTGTACTTCTGGTTTTATA
ACCTGAAATCATCTACAAGCTTGTCCAACCTTAGCCACGGGTCGAATGCAGCCCAGGACAGCTTTGAATGCAGC
CCAACACAAATTTGTAAACTTTCTTAAACTTGAGATTTTTCTTGCAATTTTTTTTTTAAGCTTATCAGCTATCGT
CAGTGTTAGCATGTTTTATGTGCGGCCCAAGACAATCTTCTCCAGTGTTGGCTCAGGGAAGCCAAAAGATTGGA
CATCCCTGATCTACATATTTAACTTAAAGTATCACTCAGTGAGCCTCTGTGAGTGAATATTGCTTTCAAAAAGA
TAGTTATGTCAAAAAGAAAAATATAGCTAAGTATATAAAGGCATAAAAACTTAAGACAATTATATGGACTTATT
CTCAAAATATTTTACATTTTGTAAACTTTCTTAAACATGAGATTTTTCTTGCAATTTTTTTTTTAAGCTCATC
AGCTGTCTCAGTGTTAGCATATTTTATGTGAGGCCCAAGACAATCTTCTTCCAATGTGGCTCAGGGAAGCCAA
AAGATTGGACATCCCTGATCTACATATTTAACTTAAAGTATCACTCATTGAAATCTTTTAAAACTATTGTCTA
ACTACAAAAATAGTGGCATATACATGCATAAACCATCTTAAATTAGAAAATTTAGTAACATTCATGTCAGGCATC
ATCGATTTTTCTTTCTTAGCTCCTGTATTCTTAGAACCAGATTGCTGAAGCATGTTGCAGCCTTCTTCTGGAA
GTTGCCTGAATTTTTTCTCTCATCTTTTTATCACCTTGTTTCAAGATGACAAGTTTGAGACGATTTCAGCCTAC

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FIGURE 3395

GGCACGAGGCTGCCGCGCTGTCCGCGTTATCTCCTCCCGGTGAGAACGAACCGCAGTGTCCACCGGCGAGGAGCC
AGCCCTGTCCCGGTGAGAGAAAGACGACGAGGATACCTGGGAGCGGGCGGGCGGGCTGGGCCGCGCCGGTGC
GGGCTGGCGACTCTGCTCCTCCGCTTGCTGCTGTCTCTGGGAACCTGGGTGCCAGCGCTGAGGGGCTTCCAGCGGA
CAGGGACCCCCCTTCCCCGGCTCCCCTGCCCACCCTGCCGGGGAGGGCGGAAGATGCCGGTGAAGAAGAAGAGAAA
ATCCCCTGGGGTGGCAGCAGCAGTAGCGGAAGACGGAGGCCTCAAAAAGTGTAATACTCCAGCTATTGCAGATC
CCAACCCCCTGCTAGACTAATAAGTGGAGAGGAACATTTTTCAAGCAAGAAGTGCCTGGCTTGGTTTTATGAATA
TGCAGGTCTGATGAAGTTGTAGGGCCAGAAGGAATGGAAAAATTTTGTGAAGACATTGGTGTGAACCTGAAAA
TATTATTATGTTAGTTTTAGCGTGAAATTGGAGGCTGAAAGCATGGGATTTTTTACCAAGGAAGAATGGTTAAA
GGGAATGACTTCATTACAGTGTGACTGCACAGAAAAGTTACAAAACAAATTTGACTTTTTGCGCTCACAGTTGAA
TGATATTTTCGTCATTTAAGAATATCTACAGATATGCCTTTGATTTTGCAAGGGATAAAGATCAGAGAAGCCTTGA
TATTGATACTGCTAAATCTATGTTAGCTCTTCTGCTTGGGAGGACATGGCCACTGTTTTCAGTATTTTACCAGTA
CCTGGAGCAATCAAAGTATCGTGTTATGAACAAAGATCAATGGTACAATGTATTAGAATTCAGCAGAACAGTCCA
TGCTGATCTTAGTAACATGATGAAGATGGTGCTTGGCCTGTTCTTCTTGATGAATTTGTTGAGTGGCAAAAAGT
CCGTCAGACATCATAGCAAGAAGTATGTGAAGAAAATGCAACCTTTCAATCCCACGTGTATACAAGCTAATGT
GATGAGGGGGAAAAAATCCAACGGGTGCATTTTTCATTCATATGAAAGACTTCTCATAGTACTTTTTTTTCCTTT
TTTTAAAGGAGGTTTTTCTTGTTACATGTGATGGGCATTGAGCCACACCTCTTCTTAGACTGAATATTGAAGTTT
TTGTTTTGAGTTATGTTTATAACATTTATTTTCAACAATAAAGATTGAGTTTGTGAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAA

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FIGURE 3396

MPVKKRKSPGVAAVAEDGGLKKCKISSYCRSQPPARLISGEEHFSSKKCLAWFYEYAGPDEVVGPEGMEKFCE
DIGVEPENIIMLVLAWKLEAESMGFFTKEEWLKGMTSLQCDCTEKLQNKFDLRSQNDISSFKNIYRYAFDFAR
DKDQRSLDIDTAKSMLALLLGRTWPLFSVFIQYLEQSKYRVMNKDQWYNVLEFSRTVHADLSNYDEDGAWPVLLD
EFVEWQKVRQTS

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FIGURE 3397

CCCAGCCCCGGCCCCGCGCCCCGGCTGCGCACGCGACGCCCCCTCCAGGCCCGCTCCTGCGCCCTATTGGTCA
TTCGGGGGGGAAGCGGCGGGAGGGGAAACGTGCGCGGCCGAAGGGGAAGCGGAGCCGGCGCCGGCTGCGCAGAGG
AGCCGCTCTCGCCGCGCCACCTCGGCTGGGAGCCCACGAGGCTGCGGCATCCTGCCCTCGGAACAATGGGACTC
GGCGCGGAGGTGCTTGGGCGCGCTGCTCCTGGGGACGCTGCAGGTGCTAGCGCTGCTGGGGCGCGCCCATGAA
AGCGCAGCCATGGCGGAGACTCTCCAACATGTGCCTTCTGACCATACAAATGAACTTCCAACAGTACTGTGAAA
CCACCAACTTCAGTTGCCTCAGACTCCAGTAATACAACGGTCACCACCATGAAACCTACAGCGGCATCTAATACA
ACAACACCAGGGATGGTCTCAACAAATATGACTTCTACCACCTTAAAGTCTACACCCAAAACAACAGTGTTC
CAGAACACATCTCAGATATCAACATCCACAATGACCGTAACCCACAATAGTTCAGTGACATCTGCTGCTTCATCA
GTAACAATCACAACAACATATGCATTCTGAAGCAAAGAAAGGATCAAAATTTGATACTGGGAGCTTTGTTGGTGGT
ATTGTATTAACGCTGGGAGTTTTATCTATTCTTTACATTGGATGCAAAATGTATTACTCAAGAAGAGGCATTTCGG
TATCGAACCATAGATGAACATGATGCCATCATTTAAGGAAATCCATGGACCAAGGATGGAATACAGATTGATGCT
GCCCTATCAATTAATTTTGGTTTTATTAATAGTTTTAAACAATATTCTCTTTTTGAAAATAGTATAAACAGGCCAT
GCATATAATGTACAGTGTATTACGTAAATATGTAAAGATTCTTCAAGGTAACAAGGGTTTGGGTTTTGAAAATAAA
CATCTGGATCCTTATAGACCGTTTCATACAATGGTTTTAGCAAGTTCATAGTAAGACAAACAAGTCCTATCTTTTT
TTTTTTGGCTGGGGTGGGGGCATTGGTCACATATGACCAGTAATTGAAAGACGTCATCACTGAAAAGACAGAATGC
CATCTGGGCATACAAATAAGAAGTTTTGTACAGCACTCAGGATTTTGGGTATCTTTTGTAGCTCACATAAAGAAC
TTCAGTGCTTTTTAGAGCTGGATATATCTTAATTACTAATGCCACACAGAAATTATACAATCAAACTAGATCTGA
AGCATAATTTAAGAAAAACATCAACATTTTTTGTGCTTTAACTGTAGTAGTTGGTCTAGAAAACAAAATACTCCA
AGAAAAAGAAAATTTTCAAATAAAACCCAAAATAATAGCTTTGCTTAGCCCTGTTAGGGATCCATTGGAGCATT
AGGAGCACATATTTTTATTAACCTTCTTTTGGAGCTTTCAATGTTGATGTAATTTTTGTCTCTGTGTAATTTAGGT
AAACTGCAGTGTTTAACATAATAATGTTTTAAAGACTTAGTTGTCAGTATTAAATAATCCTGGCATTATAGGGAA
AAAACCTCCTAGAAGTTAGATTATTTGCTACTGTGAGAATATTGTCACCACTGGAAGTTACTTTAGTTCATTTAA
TTTTAATTTTATATTTTGTGAATATTTTAAAGACTGTAGAGCTGCTTCAATATCTAGAAAATTTTAATTGAGTG
TAAACACACCTAACTTTAAGAAAAAGAACCGCTTGATGATTTTCAAAGAACATTTAGAATCTATAGAGTCAA
AACTATAGCGTAATGCTGTGTTTTATTAAGCCAGGGATTGTGGGACTTCCCCAGGCAACTAAACCTGCAGGATGA
AAATGCTATATTTCTTTTCATGCACTGTGATATTACTCAGATTTGGGGAAATGACATTTTATACTAAAACAAA
CACCAAAATATTTTAGAATAAATTCCTTAGAAAGTTTTGAGAGGAATTTTAGAGAGGACATTTCTCCTCTCCTGA
TTTGATATTCCTCAAATCCCTCCTCTTACTCCATGCTGAAGGAGAAGTACTCTCAGATGCATTATGTTAATGG
AGAGAAAAGCACAGTATTGTAGAGACACCAATATTAGCTAATGTATTTTGGAGTGTTTTCCATTTTACAGTTTA
TATTCCAGCACTCAAACCTCAGGGTCAAGTTTTAACAAAAGAGGTATGTAGTCACAGTAAATACTAAGATGGCAT
TTCTATCTCAGAGGGCCAAAGTGAATCACACCAGTTTCTGAAGGTCCTAAAAATAGCTCAGATGTCCTAATGAAC
ATGCACCTACATTTAATAGGAGTACAATAAAACTGTTGTCAGCTTTTGTGTTTTACAGAGAACGCTAGATATTAGA
ATTTTGAAATGGATCATTTCTACTTGCTGTGCATTTTAACCAATAATCTGATGAATATAGAAAAAATGATCCAA
AATATGGATATGATTGGATGTATGTAACACATACATGGAGTATGGAGGAAATTTTCTGAAAAATACATTAGATT
AGTTTAGTTTTGAAGGAGAGGTGGGCTGATGGCTGAGTTGATGTTACTAAGTTGGCCCTGACTGGTTGTGCAACC
ATTGCTTCATTTCTTTGCAAATGTAGTTAAGATATACTTTATTCTAATGAAGGCCTTTTAAATTTGTCCACTGC
ATTCTTGGTATTTCACTACTTCAAGTCAGTCAGAAGTTTCGTAGACCGACCTGAAGTTTCTTTTTGAATACTTGTT
TCTTTAGCACTTTGAAGATAGAAAAACCACTTTTTAAGTACTAAGTCATCATTGCTTGAAAAGTTTCTCTGCA
TTGGGTTTTGAAGTAGTTTTAGTTATGCTTTTTCTCTGTATGTAAGTAGTATAATTTGTTACTTTCAAATACCCGT
ACTTTGAATGTAGGTTTTTTTTGTTGTTGTTATCTATAAAAATTGAGGGAAATGGTTATGCAAAAAAATATTTTGC
TTTGACCATATTTCTTAAGCATAAAAAAATGCTCAGTTTTGCTTGCAATTCCTTGAGAATGTATTTATCTGAAG
ATCAAAACAAACAATCCAGATGTATAAGTACTAGGCAGAAGCCAATTTTAAATTTTCTTGAATAATCCATGAAA
GGAATAATTCAAATACAGATAAACAGAGTTGGCAGTATATTATAGTGATAATTTTGTATTTTCAAAAAAAG
TTAAACTCTTCTTTCTTTTTATTATAATGACCAGCTTTTGGTATTTTCATTGTTACCAAGTTCTATTTTTAGAAT
AAAATTGTTCTCCTTCTAAAA

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FIGURE 3398

CACACAGCCTACTTTCCAAGCGGAGCCATGTTTGGTAACGGCAATGCGGCTGCAACGGCGGAAGAAAACAGCCCA
AAGATGAGAGTGATTTCGCGTGGGTACCCGCAAGAGCCAGCTTGCTCGCATACAGACGGACAGTGTGGTGGCAACA
TTGAAAGCCTCGTACCCTGGCCTGCAGTTTGAAATCATTGCTATGTCCACCACAGGGGACAAGATTCTTGATACT
GCACTCTCTAAGATTGGAGAGAAAAGCCTGTTTACCAAGGAGCTTGAACATGCCCTGGAGAAGAATGAAGTGGAC
CTGGTTGTTCACTCCTTGAAGGACCTGCCCACTGTGCTTCCTCCTGGCTTCACCATCGGAGCCATCTGCAAGCGG
GAAAACCCCTCATGATGCTGTTGTCTTTACCCAAAATTTGTTGGGAAGACCCTAGAAACCCCTGCCAGAGAAGAGT
GTGGTGGGAACCAGCTCCCTGCGAAGAGCAGCCCAGCTGCAGAGAAAGTTCCCGCATCTGGAGTTCAGGACGGGG
GAAACCTCAACACCCGGCTTCGGAAGCTGGACTATTATCTCGAGTTCAGTGCCATCATCCTGGCAACAGCTGGCC
TGCAGCGCATGGGCTGGCACAACCGGGTGGGGCAGATCCTGCACCCTGAGGAATGCATGTATGCTGTGGGCCAGG
GGGCCTTGGGCGTGGAAGTGCGAGCCAAGGACCAGGACATCTTGGATCTGGTGGGTGTGCTGCACGATCCCGAGA
CTCTGCTTCGCTGCATCGCTGAAAGGGCCTTCCTGAGGCACCTGGAAGGAAGCTGCAGTGTGCCAGTAGCCGTGC
ATACAGCTATGAAGGATGGGCAACTGTACCTGACTGGAGGAGTCTGGAGTCTAGACGGCTCAGATAGCATACAAG
AGACCATGCAGGCTACCATCCATGTCCCTGCCAGCATGAAGATGGCCCTGAGGATGACCCACAGTTGGTAGGCA
TCACTGCTCGTAACATTCCACGAGGGCCCCAGTTGGCTGCCCAGAACTTGGGCATCAGCCTGGCCAACTTGTTGC
TGAGCAAAGGAGCCAAAACATCCTGGATGTTGCACGGCAGCTTAACGATGCCCATTAACCTGGTTTGTGGGGCAC
AGATGCCTGGGTTGCTGCTGTCCAGTGCCTACATCCCGGGCCTCAGTGCCCCATTCTCACTGCTATCTGGGGAGT
GATTACCCCGGGAGACTGAACTGCAGGGTTCAAGCCTTCAGGGATTTGCCTCACCTTGGGGCCTTGATGACTGC
CTTGCTCCTCAGTATGTGGGGCTTCATCTCTTTAGAGAAGTCCAAGCAACAGCCTTTGAATGTAACCAATCCT
ACTAATAAACAGTTCTGAAGGT

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FIGURE 3399

ACAGCAGTTACACTGCGGGCGGGCGTCTGTTCTAGTGTTTGAGCCGTCGTGCTTACCGGTCTACCTCGCTAGCAT
GTCGGGCGCGGGCAAGACTGGCGGCAAGGCCCGCGCCAAGGCCAAGTCGCGCTCGTCGCGCGCGGGCCTCCAGTT
CCAGTGGGCGGTGTACACCGGCTGCTGCGGAAGGGCCACTACGCCGAGCGCGTTGGCGCCGGCGGCCAGTGTA
CCTGGCGGCAGTGCTGGAGTACCTCACCGCTGAGATCCTGGAGCTGGCGGGCAATGCGGCCCGGACAACAAGAA
GACGCGAATCATCCCCCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGCTCAACAAGCTGCTGGGCGGCGT
GACGATCGCCCGAGGGAGGCGTCCTGCCCAACATCCAGGCCGTGCTGCTGCCCAAGAAGACCAGCGCCACCGTGGG
GCCGAAGGCGCCCTCGGGCGGCAAGAAGGCCACCCAGGCCCTCCAGGAGTACTAAGAGGGCCCGCGCCGCGGCCG
GCCGCCAGGCCTCCCCATGCCACCACAAAGCCCTTTTAAAGGGCCACCACCGCCCTCATGAAAGAGCTGAGCCG
CTTCAGACTGCGGGGCAAGCGGGCCGCGGCTCCCTTCCCTCCCTCCCTCGCCCGCCTTCGCCCGCCCGGCCCTC
GAGTCCCCCGCCCGCCCGCTCCCGTCCCGCACCGCCTGCCGCGTGGCGCTCGGGCCCTGCCCTGTCCGCCGTCC
GCCCTCCGGTAGGGTTTCGGGCCTTCCGGATGCGGCTTGGGCGCTCTTCGGGGACCTCCGTGGCGCGGAAGACCCG
AGCCTGCCGGGGGAGGCCGGCGGCGCCGCACCTGCCCGCCTCGGCGTTCGTGACTCAGCCGCCCATCCCGAGT
CGCTAAGGGGCTGCGGGGAGGCCGCGAGCACCTTCTGGAAGACTTGCCCTTCGCTCTGACGCGAGGGCCGAGGTGG
GCAGTCCAGGCCGAGAGGCCGGCGGCCCTGAAGGTGAGTGAGGCCCTCGGCAGCTGCAGCCGGGGTGTCTGGTAC
CCCCCGGGCGTGGTGCTTAGCCAGAAATTTTACAGACGCGGCGGCTGGCCGGGAGGCTTTGGTGGGAGAGACGCGA
TCCCAATTTTCGGTCTGGCGCCCTTTCTGCGGCCGGGACCCAGGCCCTTTCACATCAGCTCTCCCTCCATCTTCAT
TCATAGGTCTGCGCTGGGGCCGGGACGAACCACTTGGAACAGGCACATCTTCCTCCCGAGTGACTGCCTCCTAG
GAGGACATTTAGGGGAGGGCAGAGGCCTGCAGTTTGGCTTACGGCTGGCTATGTGGACAGCAAGAGTCGTTTTT
GCGGAAGCCGACTGGCAGCCAGGCCTGTGCGGCCCGCCGACGCCGCCCATTTCCCTTCCAGCAAACTCAACTCG
GCAATCCAAGCACCTAGATACCAGCACAAGTCGGTTAATCCCTGTCTGGACTGAGCCTCCGTTGGCTTCTGAACT
GGAATCTGCAGCTAACCCCTTCCAGACTAGAACCTTAGGCATTGGGGAGTTTTAGATGGACTAATTTTATTAAA
GGATTGTTTTTTTTT

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FIGURE 3400

CGGAATTGCCCATGCCGCTGCTGATCAATTTGATCGTCTCGCTGCTGGGATTTGTGGCCACAGTCACCCTCATCC
CGGCCTTCCGGGGCCACTTCATTGCTGCGCGCCTCTGTGGTCAGGACCTCAACAAAACCAGCCGACAGCAGATCC
CAGAATCCCAGGGAGTGATCAGCGGTGCTGTTTTCCCTTATCATCCTCTTCTGCTTCATCCCTTTCCCCTTCCTGA
ACTGCTTTGTGAAGGAGCAGTGTAAGGCATTCCCCCACCATGAATTTGTGGCCCTGATAGGTGCCCTCCTTGCCA
TCTGCTGCATGATCTTCTGGGCTTTGCGGATGATGTACTGAATCTGCGCTGGCGCCATAAGCTGCTGCTACATA
CAGCTGCCTCACTACCTCTCCTCATGGTATATTTACCAACTTTGGCAACACGACCATTGTGGTGCCCAAGCCTT
TCCGCCCCGATACTTGGCCTGCATCTGGACTTGGGAATCCTGTACTATGTCTACATGGGGCTGCTGCAGTGTTCTG
TACCAATGCCATCAATATCCTAGCAGGAATTAACGGCCTAGAGGCTGGCCAGTCACTAGTCATTTCTGCTTCCAT
CATTGTCTTCAACCTGGTAGAGTTGGAAGGTGATTGTCGGGATGATCATGTCTTTTCCCTCTACTTCATGATACC
CTTTTTTTTACCACCTTTGGGATTGCTCTACCACAACCTGGTACCCATCACGGGTGTTTGTGGGAGATACCTTCTG
TTACTTTTGCTGGCATGACCTTTGCCGTGGTGGGCATCTTGGGACACTTCAGCAAGACCATGCTACTATTCTTCAT
GCCCCAGGTGTTCAACTTCTCTACTCACTGCCTCAGCTCCTGCATATCATCCCCTGCCCTCGCCACCGCATACC
CAGACTCAATATCAAGACAGGCAAACCTGGAGATGAGCTATTCCAAGTTCAAGACCAAGAGCCTCTCTTTCTTGGG
CACCTTTATTTTAAAGGTGGCAGAGAGCCTCCAGCTGGTGACAGTACACCAGAGTGAGACTGAAGATGGTGAATT
CACTGAATGTAACAACATGACCCTCATCAACTTGCTACTTAAAGTCCTTGGGCCCATACATGAGAGAAACCTCAC
ATTGCTCCTGCTGCTGCTGCAGATCCTGGGCAGTGCCATCACCTTCTCCATTGATATCAGCTCGTTCGACTCTT
CTAIGATGTCTGAGTCCCTTGATCATTGTCTTTACCTCACAGTCTCTAGGATTCTGACTCAGGCTGACCTCTC
TCTCTGGTCCCAGACTGCCTCCTTGCCCAGGCCTCTCTCACTCTTCATACTCCTCCAGATTTTGTTCCTCAGCATT
TTCCTTTCTCTGTGATCATTGGCATCCTGGGCGTTTCTTGCCCTCTGCTGACTACTGATTGGATTTTACCTATGG
CTTTCTGCAACTTGCTACTCTCTCCCTCTCCATCCCATCTTTGCAGCCTCATAGGGTGGGATACAGCAGCTTTTT
TTGCAGTTATCCACACTCACATTTAGAGTCTGACTCTCAAGGAACCACTGGTTTTTGGGATAGAACTTGGGCC
AGGGCTAGGAACACAGGCTCCACGGTGACATGTCATTTGATTGTAAATTAAGTGTTCTGATTAGTAAGAACTAAG
CAGGGGGCCACATGCTCTCAATGGAGACAATAAAGTGTTGTCTTTTCTT

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FIGURE 3401

AGGCTCTTG CAGCCAATGCCGGAACAGGATTTGCTGTTGCTGAGCCTCAAATCGCAATGTTTTGTGGGAAGTTAA
ATATGCATGTGAACATT CAGACTGGGAAATGGGAACCTGATCCAACAGGCACCAAGAGCTGCTTTGAAACAAAAG
AAGAAGTTCTTCAGTACTGTCAGGAGATGTATCCAGAGCTACAGATCACAAATGTGATGGAGGCAAACCAGCGGG
TTAGTATTGACAACCTGGTGCCGGAGGGACAAAAAGCAATGCAAGAGTCGCTTTGTTACACCTTTCAAGTGTCTCG
TGGGTGAATTTGTAAGTGATGTCCTGCTAGTTCCAGAAAAGTGCCAGTTTTTCCACAAAGAGCGGATGGAGGTGT
GTGAGAATCACCAGCACTGGCACACGGTAGTCAAAGAGGCATGTCTGACTCAGGGAATGACCTTATATAGCTACG
GCATGCTGCTCCCATGTGGGGTAGACCAGTTCCATGGCACTGAATATGTGTGCTGCCCTCAGACAAAGATTATTG
GATCTGTGTCAAAGAAGAGGAAGAGGAAGATGAAGAGGAAGAGGAAGAGGAAGATGAAGAGGAAGACTATGATG
TTTATAAAAGTGAATTTCTACTGAAGCAGATCTGGAAGACTTCACAGAAGCAGCTGTGGATGAGGATGATGAGG
ATGAGGAAGAAGGGGAGGAAGTGGTGGAGGACCGAGATTACTACTATGACACCTTCAAAGGAGATGACTACAATG
AGGAGAATCCTACTGAACCCGGCAGCGACGGCACCATGTGACACAAGGAAATTACTCATGATGTCAAAGCTGTCT
GCTCCCAGGAGGCGATGACGGGGCCCTGCCGGGCCGTGATGCCTCGTTGGTACTTCGACCTCTCCAAGGGAAAGT
GCGTGCGCTTTATATATGGTGGCTGCGGGCGGAACAGGAACAATTTTGAGTCTGAGGATTATTGTATGGCTGTGT
GTAAAGCGATGATTCTCTCAACTCCTCTGCCAACCAATGATGTTGATGTGATTTTCGAGACCTCTGCAGATGATA
ATGAGCATGCTCGCTTCCAGAAGGCTAAGGAGCAGCTGGAGATTCGGCACCGCAACCGAATGGACAGGGTAAAGA
AGGAATGGGAAGAGGCAGAGCTTCAAGCTAAGAACCTCCCCAAGCAGAGAGGCAGACTCTGATT CAGCACTTCC
AAGCCATGGTTAAAGCTTTAGAGAAGGAAGCAGCCAGTGAGAAGCAGCAGCTGGTGGAGACCCACCTGGCCCGAG
TGGAAGCTATGCTGAATGACCGCCGTGCGATGGCTCTGGGAACTACCTGGCTGCCTTGCACTGTGACCCGCCAC
GGCCTCATCGCATTCTCCAGGCCTTACGGCGTTATGTCCGTGCTGAGAACAAAGATCGCTTACATACCATCCGTC
ATTACCAGCATGTGTTGGCTGTTGACCCAGAAAAGGCGGCCAGATGAAATCCAGGTGATGACACATCTCCACG
TGATTGAAGAAAGGAGGAACCAAAGCCTCTCTGCTCTACAAAGTACCTTATGTAGCCCAAGAAATTCAGAGG
AAATTGATGAGCTCCTTCAGGAGCAGCGTGAGATATGGACCAGTTCACTGCCTCAATCTCAGAGACCCCTGTGG
ACGTCCGGGTGAGCTCTGAGGAGAGTGAGGAGATCCACCGTTCCACCCCTTCCACCCCTTCCAGCCCTACCTG
AGAACGAAGACACTCAGCCGGAGTTGTACCACCAATGAAAAAGGATCTGGAGTGGGAGAGCAGGATGGGGGAC
TGATCGGTGCCGAAGAGAAAGTGATTAACAGTAAGAATAAAGTGGATGAAAACATGGTCATTGACGAGACTCTGG
ATGTTAAGGAAATGATTTTCAATGCCGAGAGAGTTGGAGGCCCTCAGGAAGAGCGGGAATCCGTGGGCCCCACTGC
GGGAGGACTTCAGTCTGAGTAGCAGTGCTCTCATTGGCCTGCTGGTCATCGCAGTGGCCATTGCCACGGTCATCG
TCATCAGCCTGGTGATGCTGAGGAAGAGGCAGTATGGCACCATCAGCCACGGGATCGTGAGGTTGATCCAATGC
TCACCCAGAAGAGCGTCACCTGAACAAGATGCAGAACCATGGCTATGAGAACCCACCTACAAATACCTGGAGC
AGATGCAGATTTAGGTGGCAGGGAGCGCGGCAGCCCTGGCGGAGGGATGCAGGTGGGCCGGAAGATCCCACGATT
CCGATCGACTGCCAAGCAGCAGCCGCTGCCAGGGGCTGCGTCTGACATCCTGACCTCCTGGACTGTAGGACTATA
TAAAGTACTACTGTAGAACTGCAATTTCCATTCTTTTAAATGGGTGAAAAATGGTAATATAACAATATATGATAT
ATAAACCTTAAATGAAAAAATGATCTATTGCAGATATTTGATGTAGTTTTCTTTTTTAAATTAATCAGAAACCC
CACTTCCATTGTATTGTCTGACACATGCTCTCAATATATAATAAATGGGAAATGTCGATTTTCAATAATAGACTT
ATATGCAGGCTGTGCTTCCGTTATGTTGTGTAAGTCAACTCTTCAGCCTCATTCACTGTCTCTGGCTTTTATTTA
AAGAAAAAAGGCAGTATTCCTTTTTTAAATGAGCTTTTCAGGAAGTTGCTGAGAAATGGGGTGGAAATAGGGAAC
TGTAATGGCCACTGAAGCACGTGAGAGACCCCTCGCAAAATGATGTGAAAGGACCAGTTTCTTGAAGTCCAGTGTT
TCCACGGCTGGATACCTGTGTCTCCATAAAAGTCTGTACCAAGGACGTTAAAGGCATTTTATTCCAGCGTC
TTCTAGAGAGCTTAGTGATACAGATGAGGGGTGTCCGCTGCTGCTTTCTTCCGAATCCAGTGCTTCCACAGAGA
TTAGCCTGTAGCTTATATTTGACATTCTTCACTGCTGTTGTTTACCTACCGTAGCTTTTACCCTTCACTTCCC
CTTCCAACATATGTCCAGATGTGAGGCTCCTCCTCTCTGGACTTTCTCAAAGGCAGTACCCTCGGCCTCTACT
TTGTCCCTCACCTCCACCCCTCCTGTACCGGCCCTTGTGACATTCACTCAGAGAAGACCACACCAAGGAGGCG
GCCGCTGGCCAGGAGAGAAACAGGGGAGGTTTGTGTTGTGTAAGGAAAGTAGTCCAGGCTGTCCCTGAAACTG
AGTCTGTGGACACTGTGGAAAGCTTTGAACAATTGTGTTTTCGTCACAGGAGTCTTTGTAATGCTGTACAGTTG
ATGTCGATGCTCACTGCTTCTGCTTTTTCTTTTTCTTTTTTAAATCTGAAGGTTCTGGTAACCTGTGGTGTAT
TTTTATTTTCTGTGACTGTTTTTGTGTTTTTCTTTTTCTTTTTCTCCCTTTGACCCATTCACTGTCTCTACC
CACTATGCACAGATTAAACTTACCTACAACTCCTTAATATGATCTGTGGAGAATGTACACAGTTTAAACACAT
CAATAAATACTTTAACTTCCA

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FIGURE 3402

MAATGTAAAAATGRLLLLLVGLTAPALALAGYIEALAAANAGTGFAVAEPQIAMFCGKLNMHVNIQTGKWEPDPT
GTKSCFETKEEVLYCQEMYPELQITNVMEANQRVSIDNWCRRDKKQCKSRFVTFFKCLVGEFVSDVLLVPEKCQ
FFHKERMEVCENHQHWHTVYKEACLTQGMTLYSYGMLLPCGVDQFHGTEYVCCPQTKIIGSVSKEEEEEDEEEEEE
EEDEEEDYDVYKSEFFTEADLEDFTEAAVDEDEDEDEEGEEVVEDRDYYYDTFKGDDYNEENPTPEGSDGTMSDK
EITHDVKAVCSQEAMTGPCRAVMRWYFDLSKGKCVRFIYGGCGGNRNNEFESEDYCMVCKAMIPPTPLPTNDVD
VYFETSADDNEHARFQKAKEQLEIRHRNRMDRVKKEWEEAELQAKNLPKAERQTLIQHFQAMVKALEKEAASEKQ
QLVETHLARVEAMLNDRRRMALENYLAALQSDPPRPHRILQALRRYVRAENKDRHLHTIRHYQHVLAVDPEKAAQM
KSQVMTHLVIEERRNQSLSLLYKVPYVAQEIQEEIDELLQEQRADMDQFTASISFVVDVRSSESESEIIPFFH
PFHPPALPENEDTQPELYHPMKKSGVGEQDGGGLIGAEKVINSKNKVDENMVIDETLDVKEMIFNAERVGGLE
EERESVGPLREDFSLSSSALIGLLVIAVAIATVIVISLVMLRKRQYGTISHGIVEVDPMLTPEERHLNKMQNHG
ENPTYKYLEQMQI

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FIGURE 3403

CTTTCACAAAAGGTGAAATGAGCTCTTTGTAGTGTTTCCCGCCAGGCTGCATTTTAGAATCACAGAGGAGGGTG
GCCCCAGGCGAGCCGGGATGACAGCTCTCCCCAGGAATCCTGCTGCCTGCTGAGAAACATGGTCAGCAAGTCCCGC
TGGAAGCTCCTGGCCATGTTGGCTCTGGTCCTGGTCGTCATGGTGTTGATTCCATCTCCCGGGAAGACAGGTAC
ATCGAGCTTTTTTATTTTCCCATCCCAGAGAAGAAGGAGCCGTGCCTCCAGGGTGAGGCAGAGAGCAAGGCCTCT
AAGCTCTTTGGCACTACTCCCAGGATCAGCCCATCTTCTGCGGCTTGAGGATTATTTCTGGGTCAAGACGCCA
TCTGCTTACGAGCTGCCCTATGGGACCAAGGGGAGTGAGGATCTGCTCCTCCGGGTGCTAGCCATCACCAGCTCC
TCCATCCCCAAGAACATCCAGAGATTGAACAATGCCCCAGTGGCTGGCTATGAGGGTGACGTGGGCTCCAAGACC
ACCATGCGTCTCTTCTACCTGAATCTGCCCCACTTCGACCCCAAAGTAGAAAACAACCCAGACACACTCCTCGTC
CTGGTAGCTTTCAAGGCAATGGACTTCCACTGGATTGAGACCATCCTGAGTGATAAGAAGCGGGTGCGAAAGGGT
TTCTGGAAACAGCCTCCCCTCATCTGGGATGTCAATCCTAAACAGATTCCGATTCTCAACCCCTTCTTCATGGAG
ATTGCAGCTGACAACTGCTGAGCCTGCCAATGCAACAGCCACGGAAGATTAAGCAGGATGCGGAATTTGGTCAG
AGCCGTTTATGTGAGAGCTCAGCAGAATGGCAGCTGAACCTGGGAGAGCACTGCCTGTTCTGAGAAAGGCCTGC
AATTGTGTCTTCACGATGCTTTTCCAAGACAGCCAAGGCAGGTATAATTTCTCAGCAAGAAAGAGGAACCTCG
GAGGTGTGCACCGCCTGGCTGGCCACCCAGGTATTGGCAAAAGTGACTGTTGGGCTGCTGGCCCCGCCCCCGCCC
GCCGTCCCTGGAGCACTCACGATGCGGTCCGGCGGCGGCGTGTCCGGATGAAGCACTTGATCTGGCCCTTCTCG
CCGTGGAGGGCGTGCTGGGTCTGGGTGCTGGAGATGATGGGGGTCCTGTTGAGAAACAGCGTCCCATAGGCAC
CCGGGAAGGGCACGTCCCTGCTGGCGCCCTCTTGGGTGGGTTCAGAAGTGATTATTAAATCCAAGCATTAGCA
AACATTTGCCGAAGGCCTGTATGTGCAAGGTAAAGTGCAAGGTAGAGGACTCAGAGATAAATTAGGCATTAGTC
ATAAACCTCTCAAGGGATCATGAGCGAATGCTTCTAAGTCAGAACCCCCAGAAGATACAAATAACTGTAAATAAAA
GGTGGTGAGTGTTAGTACCACAGGAGCGGTGCAGATAAAGTGCTAACCGACTTC

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FIGURE 3404

GGAGAAAGGAGAGAAAGGAAAGCGCGAGGAGCCGCCGCCACCAGCGCAGCAGTCCTGGAGCTGTGAGGAGAT
TCGGGGCCGTCACCCCTGCCCTCCCCTGCGTCCCGCCACCGGCCGCTTCTGTCTCGGACCCATTCCAACAATCTCGT
AAAACATGGTGGATTACTATGAAGTTCTAGGCGTGCAGAGACATGCCTCACCCGAGGATATTAAAAAGGCATATC
GGAAACTGGCACTGAAGTGGCATCCAGATAAAAAATCTGAGAATAAAGAAGAAGCAGAGAGAAAAATTCAAGCAAG
TAGCGGAGGCATATGAAGTGCTGTCGGATGCTAAGAAACAGGACATCTATGACAAATATGGCAAAGAAGGATTAA
ATGGTGGAGGAGGAGGTGGAAGTCATTTTGACAGTCCATTTGAATTTGGCTTCACATTCCGTAACCCAGATGATG
TCTTCAGGGAAATTTTTTGGTGGAAAGGGACCCATTTTCATTTGACTTCTTTGAAGACCCTTTTGAGGACTTCTTTG
GGAATCGAAGGGGTCCCCGAGGAAGCAGAAGCCGAGGGACGGGGTTCGTTTTTCTCCGTGTTCAAGTGGATTTCCGT
CTTTTAGAAGTGGATTTTCTTCTTTTGATACAGGATTTACTTCATTTGGGTCACTAGGTCACGGGGGCCCTCACTT
CATTCTCTTCCACGTCATTTGGTGGTAGTGGCATGGGCAACTTCAAATAGATATCAACTTCAACTAAAATGGTTA
ATGGCAGAAAAATCACTACAAAGAGAATTGTGAGAACGGTCAAGAAAGAGTAGAAGTTGAAGAAGATGGCCAGT
TAAAGTCCTTAACAATAAATGGTAAGGAGCAGCTGCTGCGCTTGGATAACAAGTAATTCAACGCACGCACTTAAC
AGAAATGTTAACTATAACAAGCACCATTGAGGATTAACAGGAACATTTTTTTGAAGATTTCAAACGAACTCGA
CTTTCAGTATAATTGTACCTAAAGTATTTATAAACAGCTCATCGGAGCCTCTATTTGTATAGACTTTTGAGTTG
ATTGTTGGGACCACATAATAGGACCATTTTTTTTTTGTCTTTAAAATTGTTGTAAATCTCTGTATGCACTTTGCT
TTTTTATTAAACGTACTCCAAGGTGAGTCTTGACTCTTTAGTGTAGGACAAGATTGTACACTAACACCAGCATGG
ACCTGCTTTTCATTGTGTCTGAAATGTGAGCCACGTAGTGTGGCCTGCTGTGAAGTTAACATTGCCAGGACGAT
TCTTCTACAGAAATAATTTCAAATTTTTTCAGCATTTAGTAGTGAAAGATATTAATACATTAATGGTAATACATT
TCTGGTTTAATATAAATTAAGGATGTTTTCTAGTTGTGCATGAATGCTGGCAACTTAGTAAGTTTTGACAATTGT
TTAAATATGTAATGTTAAGCTTAGGTTTAAAAAAGTAAAGCTGGTAAACTGGGTCTTTGTCAATTTGCTTTAAAAA
AAAAAAAAGAAAATAAATGCGAATGTGTTGGTGCAATC

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FIGURE 3405

MVDYYEVLGVQRHASPEDIKKAYRKLALKWHPDKNPENKEEAERKFQVAEAYEVLSDAKKQDIYDKYGKEGLNG
GGGGGSHFDSPFEFGFTFRNPDDVFREFFGGRDPFSFDFFEDPFEDFFGNRRGPRGSRSGTGSFFSVFSGFPSPF
RSGFSSFDTGFTSFGSLGHGGLTSFSSTSFGGSGMGNFKRISTSTKMVNGRKITTKRIVENGQERVEVEEDGQLK
SLTINGKEQLLRDNL

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FIGURE 3406

CAGCAGTCCTGGAGCTGTGAGGAGATTGCGGGCCGTCACCCCTGCCCTCCCCTGCGTCCCGCCACCGGCCGCTTCTGT
CCTCGGACCCATTCCAACAATCTCGTAAACATGGTGGATTACTATGAAGTTCTAGGCGTGCAGAGACATGCCTC
ACCCGAGGATATTAAAAAGGCATATCGGAAACTGGCACTGAAGTGGCATCCAGATAAAAAATCCTGAGAATAAAGA
AGAAGCAGAGAGGGACATCTATGACAAATATGGCAAAGAAGGATTAAATGGTGGAGGAGGAGGTGGAAGTCATTT
TGACAGTCCATTTGAATTTGGCTTCACATTCGTAACCCAGATGATGTCTTCAGGGAATTTTTTGGTGAAGGGA
CCCATTTTCATTTGACTTCTTTGAAGACCCTTTTGAGGACTTCTTTGGGAATCGAAGGGGTCCCCGAGGAAGCAG
AAGCCGAGGGACGGGGTCGTTTTCTCCGTGTTCACTGGATTTCGTCCTTTAGAAGTGGATTTTCTTCTTTGA
TACAGGATTTACTTCATTTGGGTCACTAGGTCACGGGGGCCTCACTTCATTCTCTTCCACGTCATTTGGTGGTAG
TGGCATGGGCAACTTCAAATAGATATCAACTTCAACTAAAATGGTTAATGGCAGAGAAGATGGCCAGTTAAAGTC
CTTAACAATAAATGGTAAGGAGCAGCTGCTGCGCTTGGATAACAAGTAATCAACGCACGC

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FIGURE 3407

CTTGTAAGATGGCGGCGCCAGGTGGAGCGCTCGGGCCCCCTGGATCCGGGGAAACGGCCAAGGTTGCGGGAGTC
TCTTCACTCTCGTCTCAAAGCCATTTGTGCCGCTGCCGCTGCCTCTACGGCCATAAATGCCCAGAGATTAGCGG
AGAAGCTCCGAGCCCAGAAACGGGAACAAGACACAAAGAAGGAGCCGGTGTCCACAAACGCTGTTACGCGGAGAG
TGCAAGAAATAGTGGGTTACACGGCAGCTGCAGCGAGTCCACCCCAACGTGCTTGCTAAGGCAGTACCCGAG
GAATTCTCCACCAGGACAAGAACCTTGTGGTCATCAATAAGCCCTACGGTCTCCCTGTGCATGGTGGCCCTGGGG
TCCAGCTCTGCATCACTGATGTACTACCTATCCTGGCAAAGATGCTTCATGGCCACAAGGCAGAGCCCTTGATC
TGTGCCACCGGCTGGACAAGGAAACCACAGGTGTAATGGTGTGGCTTGGGACAAGGACATGGCACATCAAGTCC
AAGAGTTGTTTAGAACCCGTCAGGTGGTGAAGAAGTACTGGGCCATCACTGTGCATGTCCCATGCCCCAGCAG
GAGTCGTGGACATCCCCATTGTGGAGAAGGAGGCGCAAGGCCAGCAGCAACACCACAAGATGACATTGTCCCCGA
GCTACCGCATGGACGATGGGAAAATGGTGAAAGTGGCGCGCAGCCGAATGCGCAAGTTGCTGTAACTCAGTACC
AGGTGCTCAGCAGCACTCTCTCCTCCGCCCTCGTGGAGCTCCAGCCCATCACTGGAATAAAACATCAGCTTCGAG
TTCACTTGTCTTTTGGATTGGATTGTCCAATCCTTGGTGATCACAAGTACTCAGACTGGAATAGGTTGGCCCCC
AGAAGCTGTCTGTGGGCACCCTGAAGAAGCTGGGGCTAGAACAGTCGAAGGCCCGCTACATCCCCCTTACCTGC
ACGCCCGGCAGCTGATCCTGCCTGCCCTGGGGTCCGGGAAGGAGGAACTCAACTTGGTCTGCAAACTTCCTCGCT
TCTTTGTGCATTCCCTGCACCGCTGCGTTTAGAGATGCCAAATGAGGATCAAAATGAGAACAAATGAAGCCAAGT
GTCTGGGAGCACAGTGAAGACCATGGGAGCACCTGGCACCTGGGAGCACAGTGAAGACCCCTGAGAGCATCCTGG
CACCTGGGAGCGCAGGTTGGCCCTGAACGTCTTTGTTTACAGGACTCTGCTAACTTCTCACTTGAACAGAC
TGCGTAAGAGCCAGGTGGGATAAGGTAAAGCAACTCAGCTGCTACAGGGCTTTAATGGAGAACAAGTCTATTT
ACTGATAGTTTGGCTGCACTGTGGAAAAGCCTGCTGGAAGTCTCCCTGCCGTGGGCTCTCATTTGCCAATATGGAA
CAGAGCCCAGGGCCAGGCAGACTGGGGCAGTGACTGGAAAAGGAAAACATAAGGTGAGAATCCGGGATCAGGAAC
TGTTTTTATCCAGCAGTGAAGCTCTTGAGCTCTTAGGAAGGTTCCCGTGGTTGGAAAGAACATAATGGTTAACAA
ATATCACAGCATCCAGGGATTGCCAGCTATAGTGTGGGTGCCCTACTGAACTCTGATTAGGGAACCTGTATAAG
GGTATTGAGTGTGAGGTTGAGGTGGGACATTGCTGAGCAAGGAGAACCAGTGTGAATGGCAGGCAGATAACATG
CACACATGAAGCTGGCTGGGTGTAAGGCAGTAGCGGGGAGCGGCATGCTGTCTAACAGCTGTTAGCTCCAGCTGG
TTGTTGCCATGTGGGAATGGATTTTCTCATTCTTCAGAGAAGCTGGAAACCTAGATATTTATGTGAAACCTCCC
AGTGTATTGCCAACTAAATCAAATTTTAAAGATGCTTAGGCACCTAAGCAAATAATACTTAGAGGTTGAATTTG
GTCTACAGGCTAGCAGTTTGCAGTCTATGTTTAAATGAATGGTATAGAAGTTTGGGGAAAGGTGCCATCTTGAAAA
TTCTGGATCAGTGGTTGGCATTTCGCTGCGTGTAGTATGTATCCTTTCTAGGCTTGAGATGGCTTTGGTTGGT
CCGTGAATGTAGTTATGAGAGTGCTGCCATTAAAAAATCAAAAATC

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FIGURE 3408

MAAPRWSASGPWIRGNGQGCGSLFTLVSKPFCAAAAASTAINAQRLAEKLRAQKREQDTKKEPVSTNAVQRRVQE
IVRFTRQLQRVHPNVLAKALTRGILHQDKNLVVINKPYGLPVHGGPGVQLCITDVLPILAKMLHGHKAEP LHLCH
RLDKETTGVMLAWDKDMAHQVQELFRTRQVVKKYWAITVHVMPFSAGVVDIPIVEKEAQGGQQHHKMTLSPSYR
MDDGKMVKVRRSRNAQVAVTQYQVLSSTLSSALVELQPI TGIKHQLRVHLSFGLDCPILGDHKYSDWNRLAPQKL
SVGTLKKLGLEQSKARYIPLHLHARQLILPALGSGKEELNLVCKLPRFFVHSLHRLRLEMPNEDQNNENNEAKCLG
AQ

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FIGURE 3409

CAGATAGAAACCAAATTCTATGAGGAAGTTCACGATCTTGAAAGGAATATGCTGTTCTCTATCAGCCTCTATTG
ATAAGCGATTTGAGATTATTAATGAAATTTATGAACCCACAGAAGAACAATGTGAATGGTAACCAGATAAAGAAG
ATGAGATTTGAGAGGAGTTGAAAGAAAAGGCCAAGATCGAAGATGAGAAAAAGGATGAAGAAAAAGAAGACCCCA
AAGAAATTCCTGAATTTTGGTTAACTGTTTCTAAGAATGTTGACTTGTTTCAGTGATATGTTCAACAACATGATG
AACCTATTCTGAAACACTTGAAAGATACTAAAGTGAAGCTCTCAGATGCTGACCAGCCTATGAATTTTGTCTTAG
AATTTCACTTTGAACCCAATGAATATTTTACAAATGAAATGCTGTCAAAGACATACAGGATGAGGTCAGAACCAG
ATGATTCTGATCCCTTTTCTTTTGATGGACCAGAAATTATGGGTTGCACAGGGTGCCAGATAGATTGGAAAAAAG
GAAAGAATGTCACTTTGAAAACCATTAAAGAAGAAGCAGAAACACAAGGGAAGTGGGACAGTTCATACTGTGACTG
AGAGTGGAGATCTGGATGATGATGCTGAAATCCTTGACAGACTTCAAAATAGGTCACTTTTACGTGAGCGTAT
AATCCCAAGAGCAGTGTCTACTTTACTGGAGAAGCTATTGAAGTTGATGATGATGTTTATGATGAAGAAGGTGA
AGAAGCGGATGAGGTAATGTTTACCAAATGAGCAAATAATTCTCTGTGTTTAAACATTGAGAAGCAAATTGAAT
GACTTATGTATTCCTTTGCTATAATCATTCTGCAATTTGGGTTAAAAACATTTTGGAAAATATGATTTTAGAATT
CTACAGCCAAACAGTGTATGTGTAAAGTTTCAATAAATAAA

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FIGURE 3410

MVQQHDEPILKHLKDTKVKLSADADQPMNFVLEFHFEPNEYFTNEMLSKTYRMRSEPDDSDFFSFDGPEIMGCTGC
QIDWKKGKNVTLKTIKKKQKHKGSGTVHTVTESGDLDDDAEILAQTSK

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FIGURE 3411

GGGGCCAGTCGTTGCGCCGGAAGCATTGTCTCCACCTCATCATAACAACAATTAATTTCTCTGCGGCGCTGAG
GAGGGCAGAATTTCAACCTTCGGTGTGCTTGGGAGTGGCGATTGTGATTACACGACAAAATGCCGAGGTGCTCG
GTGGAGTCAATGCGCAGTGCCCTTTGTGGAAGACTGGGACTTGGTGCAAACCCCTGGGAGAAGGTGCCTATGGAGAAG
TTCAACTTGCTGTGAATAGAGTAAGTGAAGAAGCAGTCGCAGTGAAGATTGTAGATATGAAGCGTGCCGTAGACT
GTCCAGAAAATATTAAGAAAGAGATCTGTATCAATAAAATGCTAAATCATGAAAATGTAGTAAAATTCTATGGTC
ACAGGAGAGAAGGCAATATCCAATATTTATTTCTGGAGTACTGTAGTGGAGGAGAGCTTTTTGACAGAATAGAGC
CAGACATAGGCATGCCTGAACCAGATGCTCAGAGATTCTCCATCAACTCATGGCAGGGGTGGTTTATCTGCATG
GTATTGGAATAACTCACAGGGATATTAAACCAGAAAAATCTCTGTTGGATGAAAGGGATAACCTCAAAATCTCAG
ACTTTGGCTTGGCAACAGTATTTCCGTATAATAATCGTGAGCGTTTGTGAACAAGATGTGTGGTACTTTACCAT
ATGTTGCTCCAGAATTTCTGAAGAGAAGAGAATTTTCATGCAGAACCACTTGATGTTTGGTCCTGTGGAATAGTAC
TTACTGCAATGCTCGCTGGAGAATTGCCATGGGACCAACCCAGTGACAGCTGTCAGGAGTATTCTGACTGGAAAG
AAAAAAAAACATACCTCAACCCTTGGAAAAAATCGATTCTGCTCCTCTAGCTCTGCTGCATAAAATCTTAGTTG
AGAATCCATCAGCAAGAATTACCATTCCAGACATCAAAAAAGATAGATGGTACAACAAACCCCTCAAGAAAGGGG
CAAAAAGGCCCGAGTCACTTCAGGTGGTGTGTCAGAGTCTCCAGTGGATTTTCTAAGCACATTCAATCCAATT
TGGACTTCTCTCCAGTAAACAGTGCTTCTAGTGAAGAAAATGTGAAGTACTCCAGTTCTCAGCCAGAACCCCGCA
CAGGTCTTTTCTTATGGGATACCAGCCCCTCATACATTGATAAAATTGGTACAAGGGATCAGCTTTTCCCAGCCCA
CATGTCCTGATCATATGCTTTTGAATAGTCAGTTACTTGGCACCCCAAGGATCCTCACAGAACCCCTGGCAGCGGT
TGGTCAAAGAATGACACGATTCTTTACCAATTGGATGCAGACAAATCTTATCAATGCCTGAAAGAGACTTGTG
AGAAGTTGGGCTATCAATGGAAGAAAAGTTGTATGAATCAGGTTACTATATCAACAACTGATAGGAGAAACAATA
AACTCATTTTCAAAGTGAATTTGTTAGAAATGGATGATAAAATATTGGTTGACTTCCGGCTTTCTAAGGGTGATG
GATTGGAGTTCAAGAGACACTTCTGAAGATTAAAGGGAAGCTGATTGATATTGTGAGCAGCCAGAAGGTTTGGC
TTCCTGCCACATCGATCCGACCATCGGCTCTGGGGAATCCTGGTGAATATAGTGCTGCTATGTTGACATTATTCTT
CCTAGAGAAGATTATCCTGTCTCTGCAAATGCAAATAGTAGTTCCCTGAAGTGTTCACTTCCCTGTTTATCCAAAC
ATCTTCCAATTTATTTTGTGTTGTTTCGGCATACAAATAATACCTATATCTTAATTGTAAGCAAACTTTGGGGAAA
GGATGAATAGAATTCATTTGATTATTTCTTCATGTGTGTTTAGTATCTGAATTTGAAACTCATCTGGTGGAAACC
AAGTTTCAGGGGACATGAGTTTTCCAGCTTTTATACACACGTATCTCATTTTATCAAAACATTTGTTTAATTC
AAAAAGTACATATTTCTTCCATGTTGATTTAATCTAAGATGAACCAATAAAGACATAATTCTTGCAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 3412

MAVPFVEDWDLVQTLGEGAYGEVQLAVNRVTEEAVAVKIVDMKRAVDCPENIKKEICINKMLNHENVVKFYGHRR
EGNIQYLFLEYCSGGELFDRIEFDIGMPEPDAQRFHQLMAGVVYLHGIGITHRDIKPENLLLDERDNLKISDFG
LATVFRYNNRERLLNKMCGTLPYVAPELLKRREFHAEPVDVWSCGIVLTAMLAGELPWDQPSDSCQEYSDWKEKK
TYLNPWKKIDSAPLALLHKILVENPSARITIPDIKKDRWYNKPLKKGAKRPRVTSGGVSESPSGFSKHIQSNLDF
SPVNSASSEENVKYSSSQPEPRTGLSLWDTSPSYIDKLVQGIFSQTCPDHMLLNSQLLGTGSSQNPWQRLVK
RMTRFFTKLDADKSYQCLKETCEKLGQWKKSCMNQVTISTDRRNNKLIFKVNLEMDDKILVDFRLSKGDGLE
FKRHFLKIKGLIDIVSSQKVWLPAT

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FIGURE 3413

CTGGCCTGCGGTGGGCTAGGGGCAGGGCCGGAGCCGCGGCGGCGGAGCTGTGGATCCTTCATGATGAGAGATTG
GGGACACTTCTCTCTCCTGTGTGTAGTTGATAGTTTGGTGGTGAAGAGATGGCTGACAGTGTCAAACCTTTCTC
CAGGACCTTGCCAGAGGAATCAAAGACTCCATCTGGGGTATTTGTACCATCTCAAAGCTAGATGCTCGAATCCAG
CAAAGAGAGAGAGGAGCAGCGTCGAAGAAGGGCAAGTAGTGTCTTGGCACAGAGAAGAGCCCAGAGTATAGAGCGG
AAGCAAGAGAGTGAGCCACGTATTGTTAGTAGAATTTTCCAGTGTGTGCTTGGAATGGTGGAGTGTTCTGGTTC
AGTCTCCTCTTGTGTTTTATCGAGTATTTATTCCTGTGCTTCAGTCGGTAACAGCCCGAATTATCGGTGACCCATCA
CTACATGGAGATGTTTGGTCTGGCTGGAATTCCTTCCTCACGTCAATTTTCAGTGCTCTTTGGGTGCTCCCTTG
TTTGTGCTTAGCAAAGTGGTGAATGCCATTTGGTTTCAGGATATAGCTGACCTGGCATTGAGGTATCAGGGAGG
AAGCCTCACCCATTCCCTAGTGTGAGCAAAATAATTGCTGACATGCTCTTCAACCTTTTGCTGCAGGCTCTTTTC
CTCATTGAGGAATGTTTGTGAGTCTCTTTCCCATCCATCTTGTGCGTCAGCTGGTGTAGTCTCCTGCATATGTCC
CTTCTCTACTCACTGTACTGCTTTGAATATCGTTGGTTCAATAAAGGAATTGAAATGCACCAGCGGTTGTCTAAC
ATAGAAAGGAATTGGCCTTACTACTTTGGGTTTGGTTTGGCCTTGGCTTTTCTCACAGCAATGCAGTCCCTCATAT
ATTATCAGTGGCTGCCTTTTCTCTATCCTCTTTCCCTTTATTCAATTATCAGCGCCAATGAAGCAAAGACCCTGGCA
AAGCATATCTCTTCCAGTTGCGCCTCTTCTCCTTGGTGGTCTTCTTAAGCAACAGACTCTTCCACAAGACAGTCT
ACCTGCAGTGGGCCCTGAGCAGCTCTACTTCTGCAGAGAAGTTCCCTTCACCGCATCCGTCGCCTGCCAAACTGA
AGGCTACTGCAGGTCACTGAGTTGCCTGCCATCCAAAGGGGATGGGCGGGATTGGAAGAAGCTGTGGCAGCTCTT
TTCCCTGTTACCTCCCGCTGCCAGGGAAGGCAGGACCCGCTCTGCCAAGGGCCCTCTGCGTATTCCCTTCTCT
CTGAGGAATTGAAATTTTGTCTCTGGTGCACGTAAGGCAGAAATGTTCCCTGACACCAGTGTGTGGATTTTTAAC
ATCACCGTGAGTCTGAAAGGACCACAGGTTTCTGACGCTATTTTCTAGCATTGTCAGTCCCTGTGCCTGGAC
TGATTGGAACACTTTGTTTTCTCCCTGTGCCATTTACCTTCCACCTTTCCATCCTGCCTTCTACCACCTTGG
ATGAATGGATTTTGTAAATTCTAGCTGTTGTATTTGTGAATTTGTTAATTTGTTGTTTTCTGTGAAACACATA
CATTGGATATGGGAGGTAAAGGAGTGTCCAGTTGCTCCTGGTCACTCCCTTTATAGCCATTACTGTCTTGTTC
TTGTAACCTCAGGTTAGGTTTTGGTCTCTCTTGTCTCCACTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAG
CCTGAAGAGATGAGATAGGAGGAAAGACCTCACAGCCAGATCTGCTGGGTTTTGAGGAGTGATTTCTTTCTTCC
CCTTGAAGGGGAAAAAGCTATTTTCATTGGTACATTTAAAGTCCCCCACTATGGGGAGGTACCAATTCTGGACA
AGTGCCACTACAACAACACTAAACCTGAACTTTCAACTCCGTGGTGGTGGGAGGCAGCGGGCAGAAATTTACT
GTTGGCCACTGCCAGGTCTATTTTCATATTTCAAAGGAATATTGGGTGCTGCATATAGGAAGTGAAGGGGTCAATG
TATTAAACCTGTGATTGGTTGTTTTCTGTCAATTTGAGAGACTAAATGTGGGGGGCAGATGTCAAATACCTGT
ACAATTTTAAATGTCACAATTAAACATGAGCTGGTTCCCA

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FIGURE 3414

CTGCAGCTCTTGGGTTTTTTGTGGCTTCCTTCGTTATTGGAGCCAGGCCTACACCCCAGCAACCATGTCCAAGGG
ACCTGCAGTTGGTATTGATCTTGGCACCACCTACTCTTGTGTGGGTGTTTTCCAGCACGGAAAAGTCGAGATAAT
TGCCAATGATCAGGGAAACCGAACCCTCCAAGCTATGTCGCCCTTACGGACACTGAACGGTTGATCGGTGATGC
CGCAAAGAATCAAGTTGCAATGAACCCACCAACACAGTTTTTGATGCCAAACGTCTGATTGGACGCAGATTTGA
TGATGCTGTTGTCCAGTCTGATATGAAACATTGGCCCTTATGGTGGTGAATGATGCTGGCAGGCCCAAGGTCCA
AGTAGAATACAAGGGAGAGACCAAAAGCTTCTATCCAGAGGAGGTGTCTTCTATGGTTCTGACAAAGATGAAGGA
AATTGCAGAAGCCTACCTTGGGAAGACTGTTACCAATGCTGTGGTCACAGTGCCAGCTTACTTTAATGACTCTCA
GCGTCAGGCTACCAAAGATGCTGGAACATTGCTGGTCTCAATGTACTTAGAATTATTAATGAGCCAACTGCTGC
TGCTATTGCTTACGGCTTAGACAAAAAGGTTGGAGCAGAAAGAAACGTGCTCATCTTTGACCTGGGAGGTGGCAC
TTTTGATGTGTCAATCCTCACTATTGAGGATGGAATCTTTGAGGTCAAGTCTACAGCTGGAGACACCCACTTGGG
TGGAGAAGATTTTGACAACCGAATGGTCAACCATTTTATGCTGAGTTAAGCGCAAGCATAAGAAGGACATCAG
TGAGAACAAGAGAGCTGTAAGACGCCTCCGTACTGCTTGTGAACGTGCTAAGCGTACCCTCTCTTCCAGCACCCA
GGCCAGTATTGAGATCGATTCTCTCTATGAAGGAATCGACTTCTATACCTCCATTACCCGTGCCCCGATTTGAAGA
ACTGAATGCTGACCTGTTCCGTGGCACCCTGGACCCAGTAGAGAAAGCCCTTCGAGATGCCAACTAGACAAGTC
ACAGATTCATGATATTGTCCTGGTTGGTGGTTCCTACTCGTATCCCCAAGATTCAGAAGCTTCTCCAAGACTTCTT
CAATGGAAAAGAACTGAATAAGAGCATCAACCTGATGAAGCTGTTGCTTATGGTGCAGCTGTCCAGGCAGCCAT
CTTGTCTGGAGACAAGTCTGAGAATGTTCAAGATTTGCTGCTCTTGATGTCACCTCTTTCCCTTGGTATTGA
AACTGCTGGTGGAGTCATGACTGTCTCATCAAGCGTAATACCACCATTCCCTACCAAGCAGACACAGACCTTCAC
TACCTATTCTGACAACCAGCCTGGTGTGCTTATTAGGTTTTATGAAGGCGAGCGTGCCATGACAAAGGATAACAA
CCTGCTTGGCAAGTTTTGAACTCACAGGCATACCTCCTGCACCCCGAGGTGTTCCCTCAGATTGAAGTCACTTTTGA
CATTGATGCCAATGGTATACTCAATGTCTCTGCTGTGGACAAGAGTACGGGAAAAGAGAACAAGATTACTATCAC
TAATGACAAGGGCCGTTTTGAGCAAGGAAGACATTGAACGTATGGTCCAGGAAGCTGAGAAGTACAAAGCTGAAGA
TGAGAAGCAGAGGGACAAGGTGTCATCCAAGAATCACTTGAGTCCTATGCCTTCAACATGAAAGCAACTGTTGA
AGATGAGAACTTCAAGGCAAGATTAACGATGAGGACAAACAGAAGATTCTGGACAAGTGTAATGAAATTATCAA
CTGGCTTGATAAGAATCAGACTGCTGAGAAGGAAGAATTTGAACATCAACAGAAAGAGCTGGAGAAAGTTTGCAA
CCCCATCATCACCAAGCTGTACCAGAGTGCAGGAGGCATGCCAGGAGGAATGCCTGGGGGATTTCTTGGTGGTGG
AGCTCCTCCCTCTGGTGGTGTCTCCTCAGGGCCCACCATTGAAGAGGTTGATTAA

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FIGURE 3415

GACTGCTAGGCGAGGAGAGGGAAGGGGGCGGAGGAGACAGGGCTACTGCAGGCGCAGAGCTGGGGGCAGCCGGGG
GCCCCGAGTGGCTGAGGCTGGTCCCGCAGCGGCCGCTTGCCGGCGTTCTGGCTCCTGTGGCCTCACCAGGAAGCGT
CAGAGTCCCGACACTGGGGAAGCTCGGAGCGCCGCTCCGCTGCCGCCCTCCTGCCTGGCTCTGGGTCCCCGA
GCCCCCTCCCCTGGCCAGCCGACTCCCTCCTTCCCGAACCATCCGGCTCGGGCTCCTTCCCTGGCGATGG
CTGGCCGCTGAGCCATGGCTCAGTACGGCCACCCAGTCCGCTCGGCATGGCTGCGAGAGAGGAGCTGTACAGCA
AAGTCACCCCCGGAGGAACCGCCAACAGCGCCCCGGCACCATCAAGCATGGATCGGCGCTGGACGTGCTCCTCT
CCATGGGGTTCCCCAGAGCCCGCGCACAAAAGCCTTGGCATCCACGGGAGGAAGAAGTGTTCAGGCAGCATGTG
ACTGGTTATTCTCCCATGTGCGTGACCCCTTCTGGATGACCCCTGCCCGGGAGTACGTCTCTACCTCCGTC
CCACCGGCCCTTAGCACAGAAGCTTTCCGACTTTTGGCAGCAGTCGAAGCAGATCTGCGGGAAGAACAAGGCAC
ACAACATCTTCCCCACATCACACTCTGCCAGTTCTTTATGTGCGAGGACAGCAAGGTGGATGCCCTGGGGGAAG
CCCTGCAGACCACGGTCAGTCGCTGGAAATGTAAGTTCTCGGCCCGCTGCCCTGGAGCTCTATACGTGCTCCA
ACTTCATCGGCCTCTTTGTAAAGGAAGACAGTGGGAGGTCTCAAGAAGTTGCTGCTGACTTTGCTGCAGAGG
CTGCATCCAAAACCGAAGTGCATGTGGAACCTATAAGAAGCAGCTACATGTGACCCCTGGCTTACCACCTTCCAAG
CCAGCCACCTACCCACCCTAGAGAACTGGCCAGAACATTGACGTCAAGCTAGGGTGCTGACTGGGTGGCTACCA
TATTTTCTCGGGATATCCGATTTGCTAACCATGAGACATTACAGGTCTCTACCCCTATACCCCAAAAATGACG
ATGAGCTGGAGCTGGTCCCCGGGGACTTCATCTTCATGTCTCCAATGGAGCAGACCAGCACCAGCGAGGGTTGGA
TCTATGGCAGCTCCTTAACCACCGGCTGCTCTGGACTCCTGCCTGAGAATTACATTACCAAGGCTGATGAATGCA
GCACCTGGATATTTTCATGGTTCTTATTCAATCTTAAATACATCGTCATCCAACCTCTCTACGTTTGGGGATGGAG
TATTGGAGAGGCGGCCCTTATGAGGACCAGGGGCTCGGGGAGACGACTCCTCTTACTATCATCTGCCAGCCCATGC
AGCCGCTGAGGGTCAACAGCCAGCCCGGCCCCAGAAAGCGATGCCCTTTTGTGTGTCGGCATGGTGAGAGGATGG
ATGTTGTGTTTGGGAAGTACTGGCTGTCCCAGTGCTTCGATGCCAAAGGCCGCTACATACGCACCAACCTGAACA
TGCCCTCATAGTTTACCTCAGCGGAGTGGTGGTTTCCGAGATTACGAGAAAGATGCTCCCATCACTGTGTTTGGAT
GCATGCAAGCAAGACTAGTGGGTGAAGCCTTATTAGAGAGCAATACCATTATCGATCATGTCTATTGCTCCCCGT
CCCTTCGCTGCGTTAGACTGCACACAATATCTTGAAAGGTTTACAACAAGAAAATCACTTGAAGATCCGTGTAG
AGCCCGGCTTATTTGAGTGGACAAAATGGGTGCTGGGAGCACATTACCTGCATGGATACCTCCATCAGAGTTAG
CTGCAGCCAACCTGAGTGTGATACAACCTACAGACCTCACATTCCAATCAGCAAATTAGTTGTTTCAGAATCCT
ATGATACTTATATCAGTAGAAGTTTCCAAGTAACAAAAGAAATAAAGTGAATGTAAAAGTAAAGGAAATAACA
TCCTGATTGTGGCCACGCATCTTCCCTTGAAGCGTGTACCTGCCAACTTCAGGGCCTGTCACCTCAGAACTCCA
AGGACTTCGTACAAATGGTCCGAAAGATCCCATATCTGGGATTTTGTTCCTGTGAAGAAATTAGGAGAACTGGAA
TATGGCAGCTGACAGATCCACCAATCCTTCCCTCTTACCCATGGACCAACTGGGGGCTTCAACTGGAGAGAGACCT
TGCTTCAAGAAATAACACACACAGTGAACAAGAAGGAAAGGCCTTTTGGAGTGTGCTTTCTGTGTGTTTAAAA
ACAGTGGGAAAATCCACACCACTCTAAGTGGACAGCTCAGAATAATTTAGCATATTTCTTTTCACTTAAAG
TTCTTAAGATGAGACTGTGTAAATGAGAGAAAGACTTGATTAGAGGAAAAAATGTGTTCTCTCTGGACTCTTG
CCTAGCTCACAAGGCTTTGGAGAATTGTCTTCTTAAATCGGGGCACCTGCTACAGAAGAGAATGTTTCGTTCCT
CTGGGTATGCACAGCTAAGGGGCTCATTCTCCAGAGGGAGCTGCTGGCCGCTCTAAGGGGTGCAAGAGGAA
GGAGTGTGCCAGACAGCTGGGGGAGCATTGAAAGGACAGCTTGGGGATGGAATTTTTTTTTTTTATCTCCAT
TTTCCAGTTAGGTAGAGCCAAGCTGAGGAATCCTTTAAGATTATTAGAAAACATGCCCTGAAGAGAGTTGTCT
TAGGTTACACATGAAATCCTACCGTCACTAGCCCCCATAACACAGTGTGCTGGCTGAAGATACCCGCTTAAGGA
TGCTAACATTTACCTGGTACTGCCACATTTTCTCTAGAGCAGCTGGCCCTTCTGCTACAGCCCTATCCCCCT
CCTTGCTTCTGTGAAATGGGGAGACAAAGCACTTTTGTCTCCAAAGCACTTTTGATACTCAGGAGGAAAGATA
AGATACATGTTTGAAGTATTCAATCATAGGAGCAAGAAGCTTGCAAAATATGAAGTGACTTGGAATTAACCATGT
TGTAGCCTAACGTGCTACTGCATTTCTAAATCATCAATATTGTCTTTGCCCCCTAGACTCTAGACTATGTT
AAGTAGTTAAGGATGTTACATTTTGAAGGATGTATGTTAGATATATTATTGACAGCAAGAAGTTCATTCTGTGC
AATATGGACATGTTTGAACCATACCAAGGGTCAGGTTGTTGTACACTTACAGTACGTGTCAACCATAATGGAA
CATCCACAAATGCATCAATTATACCAGGGATGTATAGTAAGTCAGGGAACCTAATATAAATGATGACAGTCATGGC
TGCAGTCTACTTGTGCTGTGCTTTTGTGTTTCTATGATAATTTAAATACATAGGTAGGGCTACTGAGGA
AATTTGGAGAGCCACATTTCTGTGGTTTCTCATTATACCTTCTCTGCATTTAGAGGGAGTTTATTTAAAGAAA
TAAATGACAATCAAACCAAAAAAAAAAAAAAAAAA

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FIGURE 3416

MAAREELYSKVTPRNRQQRPGTIKHGSA¹LDVLLSMGFPRARAQKALASTGGRSVQAACDWLF²SHVGD³PF⁴LD⁵D⁶PL⁷
PREYVLYLRPTG⁸PLA⁹Q¹⁰KL¹¹S¹²DFW¹³Q¹⁴Q¹⁵SK¹⁶Q¹⁷IC¹⁸G¹⁹K²⁰NA²¹HN²²IF²³PH²⁴IT²⁵LC²⁶Q²⁷FF²⁸MC²⁹ED³⁰SK³¹VD³²AL³³GE³⁴AL³⁵Q³⁶TT³⁷VS³⁸R³⁹W⁴⁰K⁴¹CK⁴²FS⁴³AP⁴⁴
LP⁴⁵LE⁴⁶LY⁴⁷T⁴⁸SS⁴⁹N⁵⁰FI⁵¹GL⁵²FK⁵³ED⁵⁴SA⁵⁵EV⁵⁶L⁵⁷KK⁵⁸FA⁵⁹AD⁶⁰FA⁶¹EA⁶²EA⁶³SK⁶⁴TE⁶⁵V⁶⁶H⁶⁷VE⁶⁸PH⁶⁹KK⁷⁰QL⁷¹H⁷²VT⁷³L⁷⁴AY⁷⁵HF⁷⁶Q⁷⁷ASH⁷⁸L⁷⁹PT⁸⁰LE⁸¹K⁸²LA⁸³Q⁸⁴N⁸⁵ID⁸⁶V⁸⁷
KL⁸⁸G⁸⁹CD⁹⁰W⁹¹V⁹²AT⁹³IF⁹⁴SR⁹⁵DI⁹⁶R⁹⁷F⁹⁸AN⁹⁹H¹⁰⁰ET¹⁰¹L¹⁰²Q¹⁰³VI¹⁰⁴Y¹⁰⁵P¹⁰⁶Y¹⁰⁷TP¹⁰⁸Q¹⁰⁹N¹¹⁰DE¹¹¹LE¹¹²LV¹¹³PG¹¹⁴DF¹¹⁵IF¹¹⁶MS¹¹⁷PM¹¹⁸EQ¹¹⁹T¹²⁰ST¹²¹SE¹²²G¹²³WI¹²⁴Y¹²⁵G¹²⁶T¹²⁷SL¹²⁸TT¹²⁹GC¹³⁰SG¹³¹LL¹³²PE¹³³
NY¹³⁴IT¹³⁵KA¹³⁶DE¹³⁷C¹³⁸ST¹³⁹W¹⁴⁰IF¹⁴¹H¹⁴²GS¹⁴³YS¹⁴⁴IL¹⁴⁵NT¹⁴⁶SS¹⁴⁷NS¹⁴⁸LT¹⁴⁹FG¹⁵⁰D¹⁵¹GV¹⁵²LE¹⁵³RR¹⁵⁴PY¹⁵⁵ED¹⁵⁶Q¹⁵⁷GL¹⁵⁸GE¹⁵⁹TT¹⁶⁰PL¹⁶¹TI¹⁶²IC¹⁶³Q¹⁶⁴PM¹⁶⁵Q¹⁶⁶PL¹⁶⁷R¹⁶⁸V¹⁶⁹NS¹⁷⁰Q¹⁷¹P¹⁷²GP¹⁷³Q¹⁷⁴K¹⁷⁵R¹⁷⁶CL¹⁷⁷
FV¹⁷⁸CR¹⁷⁹H¹⁸⁰GER¹⁸¹MD¹⁸²V¹⁸³V¹⁸⁴FG¹⁸⁵K¹⁸⁶Y¹⁸⁷W¹⁸⁸LS¹⁸⁹QC¹⁹⁰FD¹⁹¹AK¹⁹²GR¹⁹³Y¹⁹⁴I¹⁹⁵RT¹⁹⁶N¹⁹⁷LN¹⁹⁸MP¹⁹⁹HS²⁰⁰LP²⁰¹QR²⁰²SG²⁰³GF²⁰⁴RD²⁰⁵YE²⁰⁶K²⁰⁷D²⁰⁸AP²⁰⁹IT²¹⁰VF²¹¹G²¹²CM²¹³Q²¹⁴AR²¹⁵LV²¹⁶GE²¹⁷AL²¹⁸LE²¹⁹S²²⁰NT²²¹
II²²²D²²³H²²⁴V²²⁵YC²²⁶SP²²⁷SL²²⁸RC²²⁹V²³⁰Q²³¹TA²³²HN²³³IL²³⁴K²³⁵GL²³⁶Q²³⁷Q²³⁸EN²³⁹HL²⁴⁰K²⁴¹I²⁴²R²⁴³VE²⁴⁴P²⁴⁵GL²⁴⁶FE²⁴⁷WT²⁴⁸K²⁴⁹W²⁵⁰V²⁵¹AG²⁵²ST²⁵³LP²⁵⁴AW²⁵⁵IP²⁵⁶PS²⁵⁷EL²⁵⁸AA²⁵⁹AN²⁶⁰LS²⁶¹VD²⁶²TT²⁶³Y²⁶⁴R²⁶⁵PH²⁶⁶IP²⁶⁷
IS²⁶⁸KL²⁶⁹V²⁷⁰SE²⁷¹SY²⁷²DT²⁷³Y²⁷⁴IS²⁷⁵RS²⁷⁶F²⁷⁷Q²⁷⁸VT²⁷⁹KE²⁸⁰II²⁸¹SE²⁸²CK²⁸³SK²⁸⁴G²⁸⁵NN²⁸⁶IL²⁸⁷IV²⁸⁸A²⁸⁹H²⁹⁰AS²⁹¹SL²⁹²E²⁹³ACT²⁹⁴C²⁹⁵QL²⁹⁶QL²⁹⁷SP²⁹⁸Q²⁹⁹NS³⁰⁰K³⁰¹DF³⁰²V³⁰³Q³⁰⁴M³⁰⁵V³⁰⁶R³⁰⁷K³⁰⁸IP³⁰⁹Y³¹⁰L³¹¹G³¹²FC³¹³
SC³¹⁴EL³¹⁵GE³¹⁶TI³¹⁷GW³¹⁸LT³¹⁹DP³²⁰PI³²¹LP³²²LT³²³H³²⁴GP³²⁵T³²⁶GG³²⁷FN³²⁸W³²⁹RE³³⁰TL³³¹L³³²Q³³³E³³⁴

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FIGURE 3417

GAAGGCACCCCCATTCCCACCCTGTGCCTTCCTTGCGGGCAGAGAGGGAGAGAAGGGCTCCCCAGATCTACACCC
CTCCCTCCTGCATCTCCCCTGGAGTGTTCACCTTGCAAGCTGCCAAAACATGATGGCCTCTGGTTGTTCTGTTGAA
CTCCTTGAACGTTTAGACCCTGCACACATCTGGAAGGAGCTGGCCCCCTCAGTCCCTTCCTACTCCCCAACAAGGG
GCTCACTATCCCCAAGAAGGAGCTGTTGGGGACCCACGACGCAGCCCCCTGTACTGGATTACAGCATATTCTCAT
CTCTGGCCCCGAGGCTGCCTGTGGGGCGAGTGGAGACCTCCCATCACTG

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FIGURE 3418

ATGTGCAGCCCAGTGCCAGGTACACAGGGCTACAGAGATGTCATTATTGAGCACCTTCTGCATACAAAGCACCAT
GCTGGGCATAAGGTGGACGCAAAGAGGGGCCAGGTTACAGCCTACAAAGACCCTGCGGGTCCGCGTGCGGCTGCCG
GACGGCCAGGTGACCGAGGAGAGCCTGCAGGCGGACAGCGACGCGGACAGCATCAGCCTCGAGCTGCGCAAGCCC
GACGGCACCCCTCGTCTCCTTCACCGCCGACTTCAAGAAGGATGTGAAGGTCTTCCGGGCCCTGATCCTGGGGGAG
CTGGAGAAGGGGCAGAGTCAGTTCCAGGCCCTCTGCTTTGTCACCCAGCTGCAGCACAAATGAGATCATCCCCAGT
GAGGCCATGGCCAAGCTCCGGCAGAAAAATCCCCGGGCAGTGCGGCAGGCGGAGGAGGTTCCGGGGTCTGGAGCAT
CTGCACATGGATGTCGCTGTCAACTTCAGCCAGGGGGCCCTGCTGAGCCCCCATCTCCACAACGTGTGTGCCGAG
GCCGTGGATGCCATCTACACCCGCCAGGAGGATGTCCGGTTCTGGCTGGAGCAAGGTGTGGACAGTTCTGTGTTC
GAGGCTCTGCCCCAAGGCCTCAGAGCAGGCGGAGCTGCCTCGCTGCAGGCAGGTGGGGGACCACGGGAAGCCCTGC
GTCTGCCGCTATGGCCTGAGCCTGGCCTGGTACCCCTGCATGCTCAAGTACTGCCACAGCCGCGACCGGCCACG
CCCTACAAGTGTGGCATCCGCAGCTGCCAGAAGAGCTACAGCTTCGACTTCTACGTGCCCCAGAGGCAGCTGTGT
CTCTGGGATGAGGATCCCTACCCAGGCTAG

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FIGURE 3419

MCSPVPGTQGYRDVIEHLLHTKHHAGHKVDAKRGVQPTKTLRVVRVRLPDGQVTEESLQADSDADSSISLELRKP
DGTLSFTADFKKDVVFRLILGELEKGQSQFQALCFVTQLQHNEIIPSEAMAKLRQKNPRAVRQAEEVRGLEH
LHMDVAVNFSQGALLSPHLHNVCAEAVDAIYTRQEDVRFWLEQQGVDSSVFEALPKASEQAELPCRQVGDHGKPC
VCRYGLSLAWYPCMLKYCHSRDRPTPYKCGIRSCQKSYSFDFYVPQRQLCLWDEDPYPG

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FIGURE 3420

CTCCTCACAGGTGTGTCTCTAGTCCTCGTGGTTGCCTGCCCCACTCCCTGCCGAGACGCCTGCCAGAAAGGTCAC
CTATCCTGAACCCCAGCAAGCCTGAAACAGCTCAGCCAAGCACCCTGCGATGGAAGCTGCAGATGCCTCCAGGAG
CAACGGGTCGAGCCCAGAAGCCAGGGATGCCCGGAGCCCGTCGGGCCCCAGTGGCAGCCTGGAGAATGGCACCAA
GGCTGACGGCAAGGATGCCAAGACCACCAACGGGCACGGCGGGAGGCAGCTGAGGGCAAGAGCCTGGGCAGCGC
CCTGAAGCCAGGGGAAGGTAGGAGCGCCCTGTTTCGCGGGCAATGAGTGGCGGCGACCCATCATCCAGTTTGTGCGA
GTCCGGGGACGACAAGAAGCTCCAACTACTTCAGCATGGACTCTATGGAAGGCAAGAGGTGCGCGTACGCAGGGCT
CCAGCTGGGGGCTGCCAAGAAGCCACCCGTTACCTTTGCCGAAAAGGGCGAGCTGCGCAAGTCCATTTTCTCGGA
GTCCCGGAAGCCACGGTGTCCATCATGGAGCCCGGGGAGACCCGGCGGAACAGCTACCCCCGGGCGGACACGGG
CCTTTTTTACGGTCCAAGTCCGGCTCCGAGGAGGTGCTGTGCGACTCCTGCATCGGCAACAAGCAGAAGGCGGT
CAAGTCTGCTGGTGTGCCAGGCTCCTTTCTGCGAGCTGCATCTCAAGCCCCACCTGGAGGGCGCCGCTTCCG
AGACCACCAGCTGCTCGAGCCCATCCGGGACTTTGAGGCCCGCAAGTGTCCCGTGCATGGCAAGACGATGGAGCT
CTTCTGCCAGACCGACAGACCTGCATCTGCTACCTTTGCATGTTCCAGGAGCACAAGAATCATAGCACCGTGAC
AGTGGAGGAGGCCAAGGCCGAGAAGGAGACGGAGCTGTCACTGCAAAAGGAGCAGCTGCAGCTCAAGATCATTGA
GATTGAGGATGAAGCTGAGAAGTGGCAGAAGGAGAAGGACCGCATCAAGAGCTTCACCACCAATGAGAAGGCCAT
CCTGGAGCAGAACTTCCGGGACCTGGTGCGGGACCTGGAGAAGCAAAAGGAGGAAGTGAAGGGCTGCGCTGGAGCA
GCGGGAGCAGGATGCTGTGGACCAAGTGAAGGTGATCATGGATGCTCTGGATGAGAGAGCCAAGGTGCTGCATGA
GGACAAGCAGACCCGGGAGCAGCTGCATAGCATCAGCGACTCTGTGTTGTTTCTGCAGGAATTTGGTGCATTGAT
GAGCAATTACTCTCTCCCCCACCCTGCCACCTATCATGTCTGCTGGAGGGGGAGGGCCTGGGACAGTCACT
AGGCAACTTCAAGGACGACCTGCTCAATGTATGCATGCGCCACGTTGAGAAGATGTGCAAGGCGGACCTGAGCCG
TAACTTCATTGAGAGGAACCACATGGAGAACGGTGGTGACCATCGCTATGTGAACAACCTACACGAACAGCTTCGG
GGGTGAGTGGAGTGACCCGGACACCATGAAGAGATACTCCATGTACCTGACACCCAAAGGTGGGGTCCGGACATC
ATACCAGCCCTCGTCTCCTGGCCGCTTCACCAAGGAGACCACCCAGAAGAATTTCAACAATCTCTATGGACCAA
AGGTAACCTACACCTCCCGGTCTGGGAGTACTCCTCCAGCATTGACAACTCTGACAATGACCTGCCCCGTCGTCCA
AGGCAGCTCCTCCTTCTCCCTGAAAGGCTATCCCTCCCTCATGCGGAGCCAAAAGCCCCAAGGCCAGCCCCAGAC
TTGGAATCTGGCAAGCAGACTATGCTGTCTCACTACCGGCCATTCTACGTCAACAAAGGCAACGGGATTGGGTG
CAACGAAGCCCCATGAGCTCCTGGCGGAAGGAACGAGGCGCCACACCCCTGCTCTTCTCTGACCCTGCTGCTC
TTGCCTTCTAAGCTACTGTGCTTGTCTGGGTGGGAGGGAGCCTGGTCTGCACCTGCCCTCTGCAGCCCTCTGCC
AGCCTCTTGGGGGAGTTCCGGCCTCTCCGACTTCCCCACTGGCCACACTCCATTGAGACTCCTTTCTGCTTGC
TGACCTCAGATGGTCACCATCATTCCTGTGCTCAGAGGCCAACCCATCACAGGGGTGAGATAGGTGGGGCCTGC
CCTAACCCGCCAGCCTCCTCCTCTCGGGCTGGATCTGGGGGCTAGCAGTGAGTACCCGCATGGTATCAGCCTGCC
TCTCCCGCCACGCCCTGCTGTCTCCAGGCCTATAGACGTTTCTCTCCAAGGCCCTATCCCCCAATGTTGTCAGC
AGATGCCTGGACAGCACAGCCACCCATCTCCATTACATGGCCACCTCCTGCTTCCAGAGGACTGGCCCTAC
GTGCTCTCTCTCGTCTACCTATCAATGCCCAGCATGGCAGAACCTGCAGCCCTTGGCCACTGCAGATGGAAACC
TCTCAGTGTCTTGACATCACCTACCCAGGCGGTGGGTCTCCACCACAGCCACTTTGAGTCTGTGGTCCCTGGAG
GGTGGCTTCTCCTGACTGGCAGGATGACCTTAGCCAAGATATCCTCTGTTCCCTCTGCTGAGATAAAGAATTCC
CTTAACATGATATAATCCACCATGCAAATAGCTACTGGCCAGCTACCATTTACCATTTGCCTACAGAATTTC
TTCAGTCTACACTTTGGCATTCTCTCTGGCGATGGAGTGTGGCTGGGCTGACCGCAAAAGGTGCCTTACACACTG
CCCCACCCTCAGCCGTTGCCCCATCAGAGGCTGCCCTCCTCCTCTGATTACCCCCCATGTTGCATATCAGGGTG
CTCAAGGATTGGAGAGGAGACAAAACCAGGAGCAGCACAGTGGGGACATCTCCCGTCTCAACAGCCCCAGGCCTA
TGGGGGCTCTGGAAGGATGGGCCAGCTTGCAGGGGTGGGGAGGGAGACATCCAGCTTGGGCTTTCCCTTTGGA
ATAAACCATTGGTCTGTC

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FIGURE 3421

MEAADASRSNGSSPEARDARSPSGPSGSLNGTKADGKDAKTTNGHGGEAAEGKSLGSALKPGEGRSALFAGNEW
RRPIIQFVESGDDKNSNYFSMDSMEGKRSPYAGLQLGAACKPPVTFAEKGELRKSIFSES RKPTVSIMEPGETRR
NSYPRADTGLFSRSKSGSEEVLCDSICGNKQKAVKSLVCQASFCEHLKPHLEGAAFRDHQLLEPIRDFEARKC
PVHGKTMELFCQTDQTCICYLCMFQEHKNHSTVTVEEAKAEKETELSLQKEQLQLKIIIEIEDEAEKWQKEKDRIK
SFTTNEKAILEQNFRDLVRDLEKQKEEVRAALEQREQDAVDQVKVIMDALDERAKVLHEDKQTREQLHSISDSVL
FLQEFGALMSNYSLPPPLPTYHVLLEGEGLGQSLGNFKD DLLNVCMRHVEKMCKADLSRNFIERNHMENGGDHRY
VNNTNSFGGEWSAPDTMKRYSMYLTPKGGVRTSYQPSSPGRFTKETTKNFNNLYGKGNYSRVWEYSSSIQN
SDNDLPVVQSSSFLKGYP SLMRSQSPKAQPQTWKSGKQTMLSHYRPFYVNKGNGIGSNEAP

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FIGURE 3422

CTCCTCACAGGTGTGTCTCTAGTCCTCGTGGTTGCCTGCCCCACTCCCTGCCGAGACGCCTGCCAGAAAGGTCAC
CTATCCTGAACCCAGCAAGCCTGAAACAGCTCAGCCAAGCACCCCTGCGATGGAAGCTGCAGATGCCTCCAGGAG
CAACGGGTCGAGCCCAGAAGCCAGGGATGCCCGAGCCCGTCGGGCCCCAGTGGCAGCCTGGAGAATGGCACCAA
GGCTGACGGCAAGGATGCCAAGACCACCAACGGGCACGGCGGGAGGCAGCTGAGGGCAAGAGCCTGGGCAGCGC
CCTGAAGCCAGGGGAAGGTAGGAGCGCCCTGTTGCGGGCAATGAGTGGCGGCGACCCATCATCCAGTTTGTGCA
GTCCGGGGACGACAAGAATCCAATACTTTCAGCATGGACTCTATGGAAGGCAAGAGGTGCGCGTACGCAGGGCT
CCAGCTGGGGGCTGCCAAGAAGCCACCCGTTACCTTTGCGGAAAAGGGCGAGCTGCGCAAGTCCATTTTCTCGGA
GTCCCGGAAGCCACGGTGTCCATCATGGAGCCCGGGGAGACCCGGCGGAACAGCTACCCCCGGGCGACACGGG
CCTTTTTTACGGTCCAAGTCCGGCTCCGAGGAGGTGCTGTGCGACTCCTGCATCGGCAACAAGCAGAAGGCGGT
CAAGTCTGCTGGTGTGCCAGGCCTCCTTCTGCGAGCTGCATCTCAAGCCCCACCTGGAGGGGCGCCGCTTCCG
AGACCACAGCTGCTCGAGCCCATCCGGGACTTTGAGGCCCGCAAGTGTCCCGTGCATGGCAAGACGATGGAGCT
CTTCTGCCAGACCGACAGACCTGCATCTGCTACCTTTGCATGTTCAGGAGCACAAGAATCATAGCACCGTGAC
AGTGGAGGAGGCCAAGGCCGAGAAGGAGACGGAGCTGTCACTGCAAAAGGAGCAGCTGCAGCTCAAGATCATTGA
GATTGAGGATGAAGCTGAGAAGTGGCAGAAGGAGAAGGACCGCATCAAGAGCTTCACCACCAATGAGAAGGCCAT
CCTGGAGCAGAACTTCCGGGACCTGGTGCGGGACCTGGAGAAGCAAAAGGAGGAAGTGAAGGGCTGCGCTGGAGCA
GCGGGAGCAGGATGCTGTGGACCAAGTGAAGGTGATCATGGATGCTCTGGATGAGAGAGCCAAGGTGCTGCATGA
GGACAAGCAGACCCGGGAGCAGCTGCATAGCATCAGCGACTCTGTGTTGTTTCTGCAGGAATTTGGTGCATTGAT
GAGCAATTACTCTCTCCCCCACCCCTGCCACCTATCATGTCTGCTGGAGGGGGAGGGCCTGGGACAGTCACT
AGGCAACTTCAAGGACGACCTGCTCAATGTATGCATGCGCCACGTTGAGAAGATGTGCAAGGCGGACCTGAGCCG
TAACTTCATTGAGAGGAACACATGGAGAACGGTGGTGACCATCGCTATGTGAACAATAACGAAACAGCTTCGG
GGGTGAGTGGAGTGACCCGACACCATGAAGAGATACTCCATGTACCTGACACCCAAAGGTGGGGTCCGGACATC
ATACCAGCCCTCGTCTCCTGGCCGCTTACCAAGGAGACCACCCAGAAGAATTTCAACAATCTCTATGGCACCAA
AGGTAACTACACCTCCCGGTCTGGGAGTACTCCTCCAGCATTGAGAACTCTGACAATGACCTGCCCCGTCGTCCA
AGGCAGCTCCTCCTTCTCCTGAAAGGCTATCCCTCCCTCATGCGGAGCCAAAGCCCCAAGGCCAGCCCCAGAC
TTGGAAATCTGGCAAGCAGACTATGCTGGTGGTTTAAGCAAGGTCTGAGCATCCCTCAAGTCTGCTGTGGACCA
CACAAAGGCAAGGAGCTGACCAGGAGGTGTGAGTTCCCTGAGAGACAGGGCCAAAGGCAGTGTACCCTTGAGTCT
CACTACCGGCCATTCTACGTCAACAAAGGCAACGGGATTGGGTCCAACGAAGCCCCATGAGCTCCTGGCGGAAGG
GTGCTCAAGGATTGGAGAGGAGACAAAACAGGAGCAGCACAGTGGGGACATCTCCCGTCTCAACAGCCCCAGGC
CTATGGGGGCTCTGGAAGGATGGGCCAGCTTGAGGGGTGGGGAGGAGACATCCAGCTTGGGCTTTCCCTTT
GGAATAAACCATTTGGTCTGTC

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FIGURE 3423

MEAADASRSNGSSPEARDARSPSGPSGSLNGTKADGKDAKTTNGHGGEEAAEGKSLGSALKPGEGRSALFAGNEW
RRP I IQFVESGDDKNSNYFSMDSMEGKRSPYAGLQLGAACKPPVTFAEKGELRKSIFSES RKPTVSIMEPGETRR
NSYPRADTGLFSRSKSGSEEVLCDSICIGNKQKAVKSCLVQASFCLEHLKPHLEGAAFRDHQLLEPIRDFEARKC
PVHGKTMELFCQTDQTCICYLCMFQEHKNHSTVTVEEAKAEKETELSLQKEQLQLKIIIEIEDEAEKWQKEKDRIK
SFTTNEKAILEQNFRDLVRDLEKQKEEVRAALEQREQDAVDQVKVIMDALDERAKVLHEDKQTREQLHSISDSVL
FLQEFGALMSNYSLPPPLPTYHVLLEGEGLGQSLGNFKDDLLNVCMRHVEKMCKADLSRNFIERNHMENGGDHRY
VNNYTNSFGGEWSAPDTMKRYSMYLTPKGGVRTSYQPSSPGRFTKETTKQNFNNLYGTKGNYTSRVWEYSSSIQN
SDNDLPVVQGSSSFSLKGYP SLMRSQSPKAQPQTWKS GKQTMLVV

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FIGURE 3424

GGTGACTTTTTGAAAAGATAGTATCTCTTGTGCAAGAAATGGTCCATCTGTGATTTCAAGTCTCTCGCTTGAGT
GAATTGGATGGAAGTGTGAATTTTCAGCCGAAGTGGCCAAAGAAATCCTGTTCTGTGATAATGAACGCCATCAGC
CTCTGCACCTCTGTTTTCCCTTCTGCCACATGTTGCCTGTTCTCCGTGACTTTGGCCCCGCAGCGCCTCCACCCC
AGAGACCCGGACCAAGTTCACACAGGACAATCTGTGCCGTGCCAGCGCAAGCGCCTGGAGCTCGGCCAACCTGT
GGGTTCTTGTGGACTGCATCCTTCGCGACACCTCCGAGGACCTGGGACTCCAGTGTGACGCCGTGAACCTGGCCT
TCGGGCGCCGCTGTGAGGAAGTGGAGGACGCGCGGCACAAGCTGCAGCACCACCTGCACAAGATGCTGCGGGAAA
TCACAGATCAGGAACACAACGTGGTGGCACTGAAGGAGGCCATCAAGGACAAGGAGGAACCTCTGCACATAGCCC
AGACCCGGCTGTACCTGCCCTCACACCGGCCAACATGCAGCTGTGCCGCGAAGCAGCCAGTTTCAGGTACTGCC
TGGGCCTCTGAAGCAGTCCCAXGTGCCCCCATCCACCTCCTCGCTGTTACCCTCTCCAATAAACACTCCAATCTC
CACACACACATCCCCACAGGTGCTGAGAGGGGAGGGAGACTTTGCGGCCACACACAACACGCAAGCACGCCTTA
AACACACAGATATAGACATGACACTGGGCAGGTCATGGGTGCGGGGCCTCCAGTGCCAGGGACCTGTGCCCCAG
TGGTCTCACCCACCCCTGTGCTACCTCATCTTCCCGGGGAGGAAGCTCCTTCAGACAAGGTGAGCTCCTGGAGGC
CACGGGGCCAGAGAGGCCAGAGAGGGCCATTCCCTGCTGCCCTGAGGGTGTGTGCCCCACCTCTGGTGAAAGTA
TGACCTACGCCTGGGCTACAGGCATAGATGGGCCGTCTTTTGTTCCTTGTTAACGGATGCC

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FIGURE 3425

MLPVLRDFGPAAPPPQRPSPSSHTICAVPSASAWSSANLWVLVDCILRDTSEDLGLQCDAVNLAFGRRCEELED
ARHKLQHHLHKMLREITDQEHNVVALKEAIKDKEEPLHIAQTRLYLP SHRPNMQLCREAAQFRYCLGL

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FIGURE 3426

ATGGGAAATTCGATGGACATGGACATAAGCCCCCTGAGGCCCCAGGACTATCTTTTCAGTTGTGAACTAAAGGCC
GACGAATTGAAGTGTGGTTCAGGGCCAGTGTATATTAGTGGACAGCACTTAGTATCTGTGGAGGAAGATGCAGAG
TCAGAAGATGAAGAAGAGGAGGATGTGAACTCTTAATCGAAGCCAAGTTCATCAATTATGTGAAGAATTGCTTC
CGGAAGACTGACCAGGAGGCTATTCAAGATCTCTGGCAGCGGAGGAAGCCTCTTGAAGAAAATAGTTTAAACAGT
TTTTTATAA

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ACAATTTCGCGCCAAACTTGACCGCGCGTTCTGCTGTAAACGAGCGGGCTCGGAGGTCCTCCCGCTGCTGTCATG
TTGGTTTCGCTAAACTGCATCGTCGCTGTGTCCCAGAACATGGGCATCGGCAAGAACGGGGACCTGCCCTGGCCAC
CGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAACCTCTTCAGTAGAAGGTAAACAGAATCTGGTGA
TTATGGGTAAGAAGACCTGGTTCCTCATTTCTGAGAAGAAATCGACCTTTAAAGGGTAGAATTAATTTAGTTCTCA
GCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTTTCTTTCCAGAAGTCTAGATGATGCCTTAAAACCTTACTG
AACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAGTTGGTGGCAGTTCTGTTTATAAGGAAGCCATGA
ATCACCCAGGCCATCTTAAACTATTTGTGACAAGGATCATGCAAGACTTTGAAAGTGACACGTTTTTTCCAGAAA
TTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTGTTCTCTCTGATGTCCAGGAGGAGAAAAGGCATTA
AGTACAAATTTGAAGTATATGAGAAGAAATGATTAATATGAAGGTGTTTTCTAGTTTAAAGTTGTTCCCCCTCCCTC
TGAAAAAAGTATGTATTTTTACATTAGAAAAGGTTTTTTTGTGTGACTTTAGATCTATAATTATTTCTAAGCAACTA
GTTTTTATTCCCCACTACTCTTGTCTCTATCAGATACCATTTATGAGACATTCTTGCTATAACTAAGTGCTTCTC
CAAGACCCCAACTGAGTCCCCAGCACCTGCTATAGTGAGCTGCCATTCCACACCCATCACATGTGGCACTCTTG
CAGTCTTTGACATTGTGCGGCTTTTCACATGTTGGTAATATTTATTAAAGATGAAGATCCACATACCTTCAACT
GAGCAGTTTCACTAGTGGAATACCAAAAGATTCCCTACGTGTATATCCAGAGGTTTGATAGATAAATGTTGCCACC
TTGTTTGTAAACAGTGGAATTAAGAAACCACTTGGAAAGTCCAGTGATGGGAAAATGAGTATGTTTCTGCTTAGA
TTGGGGAAACCCAAAGCAGATTGCAAGACTGAAATTTCAAGTGAAGCAGTGATTTGCTAGGTCATACCAGAAATC
ATCAATTGAGGTACGGAGAAACTGAAGTGAAGGTAAGAAAAGCAATTTAAAGTCAGCGAGCAGGTTCTCATTG
ATAACAAGCTCCATACTGCTGAGATACAGGGAATGGAGGGGGGAAAGCTGGAGTATTGATCCCGCCCCCTCCT
TGGTTGTGAGCTCCCTGTCTGTGTGTGGGCGGAACATAGTCCAGCTGCTCTATAGCAAGTCTCAGGTGTTTGCA
GTAAGAAGCTGCTGGCATGCACGGGAACAGTGAATGCCAAACACTTAAAGCAATTCGATGTTTAAAGTATGTAAGT
TCTTTTTTTTTTAGACAGCGTTTCGCTCTTGTGTTGCCAGGCTAGCATGCAATGGTGTGACCTCGGCTTACTGCAA
CCTCCGCCTTCCCAGATTCAAGCGATTCTCCTGCCTCAGGCTCCCAAGTAGCTGGGACCGGGTGCGCGCCACCAC
GCCCCGGCTAATTTTTGTATTTTGTATTTTGGTAGAGATGGGGTTTCGCCATGTTGGTCAGGCTAGTCTCGAACT
CGTGACCGCAAGCGATTACCCACCTCAGCCTCCCAAAGTGCTGGGATTACCGGCTTGAGCCACCACACCCGGCA
CATCTTCATTCTTTTTATGTAGTAAAAAGTATAAGGCCACACATGGTTTATTTGAAGTATTTTACAATTTAAAAA
AATACAGAAGCAGGAAAACCAATTATAAGTTCAGTGAGGGATGATGGTTGCTTGAACCAAAGGGTTGCATGTAG
TAAGAAATTGTGATTTAAGATATATTTTAAAGTTATAAGTAGCAGGATATCTGATGGAGTTTGACTTTGGTTTT
GGGCCCACGGAGTTTCAGATGCCTTTGAGAAATGAATGAAGTAGAGAGAAAAATAAAGAAAAACTAGCCAGGCAC
AGTGGCTCACGCCTGTAATCCAGCGCTTTGGGAGGCTAAGGCAGGCAGATCACTTGAGACCAGCTTGGGCAACA
TGGCGAAGCCCCATCTCTACAAAAAACACAGAAATTAGCTGGGCATTGTGGCGCACACCTGTATTCCCATCTACT
CAGGAAGCTGAGATGGAAGAATTAATTGAGCCCACGAGTTCAAGGCTGCAGTGAGTCGTGATTGTGCCACTGCAC
TCCAGCCGGGGTGACAGAAGAGACCTTGCTCGAAAAGGAATCTGAAAACAATGGAACCATGCCTTCATAATTCT
AGAAAGTTATTTCAACTGATAAATCTATATTCACCCAAATAATCAAGGGTGAAGGTAAAAATAACATTTTATG
ACAAGCAAAGACTCAGGGGTTACCTCCATGTGCCCTTTTTAGGGAGCTGTTGGAGAAAAACTCCAGCAAAATG
AAGGAGTACACAAACCAGAGAATGACATGAATCCAGCAAAATAGGATCCAACACAGGCAATATTCCAGCTATGGAG
CTAGCTTTAAAAGGAACAGTAAAAATATTAATCGGTTAGCTGGGTGGAATGGCCCATGCCTGTAGTCCCAGCTA
CTCGGGAGGCTCAGCAGCAGGACGACTTGAGCCCAAGAGTTCCAGACCAGCCTGGCCACCTTAGTGAGATCCCTT
CTCTTAAAAATAATAACTTATTGCCAGATTTGGGGCATTGGAAGAAGTTTCATTGAAGATAAAGCAAAAGTAAA
AAAAAAAAAAAAAAAAAAAAACAAGGGGAAAGGGTTGGTTAGGCAATCATTCTAGGGCAGAAAGAGTACAGGATAG
GAAGAGCATAATACACTGTTTTTCTCAACAAGGAGCAGTATGTACACAGTCATAATGATGTGACTGCTTAGCCCC
TAAATATGGTAACTACTCTGGGACAATATGGGAGGAAAAGTGAAGATTGTGATGGTGAAGAGCTAAATCCTCAT
CTGTCATATCCAGAAATCACTATATAATACATAATAATGAAATGACTAAGTATGTGAGGAAAAAACAAGAGAC
ATTGCTAAAAGAGTTAAAGACTTATGCTCTGGAGAATTAGGAGGGATGGGGCAGGGGACTGTTAGGATGCATTAT
AAACTGAAAAGCCTTTTTTAAATTTTATGTATTAATATATGCAATTCACCTTGAAAAAACTAAAAAACAATAATT
TGGAAAAACCCATGAAGGTAACTAACGGAAGGAAAAAATAAGAGAATGAAAAGTATTTGCCTCTGGAAAGAACA
CTGGCAGGACTGTTGTTTTTATTGTAAAGACTTTTGGAGCCATTTAATTGTACTTAACCATTTTCATCTATTTCTT
TAATAAGAACAATTCATCTTAATAAAGAGTTACACTTGTTAATA

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FIGURE 3428

GGAGGTCCTCCCGCTGCTGTCATGGTTGGTTCGCTAAACTGCATCGTCGCTGTGTGCCAGAACATGGGCATCGGC
AAGAACGGGGACCTGCCCTGGCCACCGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAACCTCTTCA
GTAGAAGGTAAACAGAACTCTGGTGATTATGGGTAAGAAGACCTGGTTCTCCATTCTTGAGAAGAATCGACCTTTA
AAGGGTAGAATTAATTTAGTTCTCAGCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTCTTTCCAGAAGT
CTAGATGATGCCTTAAACTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAGTTGGTGGC
AGTTCTGTTTATAAGGAAGCCATGAATCACCCAGGCCATCTTAACTATTTGTGACAAGGATCATGCAAGACTTT
GAAAGTGACACGTTTTTCCAGAAATTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTGTTCTCTCT
GATGTCCAGGAGGAGAAAGGCATTAAGTACAAATTGAAGTATATGAGAAGAATGATTAATATGAAGGTGTTTTTC
TAGTTTAAGTTGTTCCCCCTCCCTCTGAAAAAATACCATTTATGAGACATTCTTGCTATAACTAAGTGCTTCTC
CAAGACCCCAACTGAGTCCCCAGCACCTGCTATAGTGAGCTGCCATTCCACACCCATCACATGTGGCACTCTTG
CAGTCCTTGACATTGTCGGGCTTTTCACATGTTGGTAATATTTATTAAAGATGAAGATCC

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FIGURE 3429A

ATGTCTGGCGGCGCCGCGAGAGAAGCAGAGCAGCACTCCCGGTTCCCTGTTCCTCTCGCCGCCGGCTCCTGCCCCC
AAGAATGGCTCCAGCTCCGATTCCCTCCGTGGGGGAGAACTGGGAGCCGCGGCCGCCGACGCTGTGACCGGCAGG
ACCGAGGAGTACAGGCGCCGCCGCCACACTATGGACAAGGACAGCCGTGGGGCGGCCGCGACCACTACCACCACT
GAGCACCCTTCTTCCGCCGGAGCGTCATCTGTGACTCCAATGCCACTGCACTGGAGCTTCCCGCCCTTCTCTT
TCCCTGCCCCAGCCAGCATCCCCGCGGCTGTCCCGCAGAGTGCTCCACCGGAGCCCCACCGGAAGAGACCGTG
ACCGCCACCGCCACTTCCAGGTAGCCAGCAGCCTCCAGCCGCTGCCGCCCTGGGGAACAGGCCGTGCGGGGC
CCTGCCCCCTCGACTGTCCCGAGCAGTACCAGCAAAGACCGCCAGTGTCCAGCCTAGCCTTGTGGGAGCAAA
GAGGAGCCGCGCGCGGCGAGAAGTGGCAGCGCGCGGCGGAGCGCCAAGGAGCCACAGGAGGAACGGAGCCAGCAG
CAGGATGATATCGAAGAGCTGGAGACCAAGGCCGTGGGAATGTCTAACGATGGCCGCTTCTCAAGTTTGACATC
GAAATCGGCAGAGGCTCCTTTAAGACGGTCTACAAAGGTCTGGACACTGAAACCACCGTGGAGTGCCTGGTGT
GAACTGCAGGATCGAAAATTAACAAAGTCTGAGAGGCAGAGATTTAAAGAAGAAGCTGAAATGTTAAAGGTCTT
CAGCATCCCAATATTGTTAGATTTTATGATTCTGGGAATCCACAGTAAAAGGAAAGAGTGCAITGTTTTGGTG
ACTGAACTTATGACGTCTGGAACACTTAAACGTATCTGAAAAGGTTTAAAGTGATGAAGATCAAAGTCTAAGA
AGCTGGTGCCGTGAGATCCTTAAAGGTCTTCAGTTTCTTCATACTCGAACTCCACCTATCATTACCGCGATCTT
AAATGTGACAACATCTTTATCACCGGCCCTACTGGCTCAGTCAAGATTGGAGACCTCGGTCTGGCAACCCTGAAG
CGGGCTTCTTTTGCCAAGAGTGTGATAGGTACCCAGAGTTCATGGCCCTGAGATGTATGAGGAGAAATATGAT
GAATCCGTTGACGTTTATGCTTTTGGGATGTGCATGCTTGAGATGGCTACATCTGAATATCCTTACTCGGAGTGC
CAAAATGCTGCACAGATCTACCGTTCGCGTGACCAGTGGGGTGAAGCCAGCCAGTTTTGACAAAGTAGCAATTCCT
GAAGTGAAGGAAATTATTGAAGGATGCATACGACAAAACAAAGATGAAAGATATTCATCAAAGACCTTTTGAAC
CATGCCTTCTTCCAAGAGGAAACAGGAGTACGGGTAGAATTAGCAGAAGAAGATGATGGAGAAAAATAGCCATA
AAATTATGGCTACGTATTGAAGATATTAAGAAATTAAAGGGAAAAATACAAAGATAATGAAGCTATTGAGTTTCT
TTTGATTTAGAGAGAGATGTCCAGAAGATGTTGCACAAGAAATGGTAGAGTCTGGGTATGTCTGTGAAGGTGAT
CACAAGACCATGGCTAAAGCTATCAAAGACAGAGTATCATTAAATTAAGAGGAAACGAGAGCAGCGGCAGTTGGTA
CGGGAGGAGCAAGAAAAAAGCAGGAAGAGAGCAGTCTCAAACAGCAGGTAGAACAATCCAGTGCTTCCCAG
ACAGGAATCAAGCAGCTCCCTTCTGCTAGCACCGGCATACCTACTGCTTCTACCACTTCAGCTTCAGTTTCTACA
CAAGTAGAACCTGAAGAACCTGAGGCAGATCAACATCAACAACCTACAGTACCAGCAACCCAGTATATCTGTGTTA
TCTGATGGGACGGTTGACAGTGGTCAGGGATCCTCTGTCTTACAGAATCTCGAGTGAGCAGCCAACAGACAGTT
TCATATGGTTCCCAACATGAACAGGCACATTCTACAGGCACAGTCCCAGGGCATATACCTTCTACTGTCCAAGCA
CAGTCTCAGCCCCATGGGGTATATCCACCCTCAAGTGTGGCACAGGGGCAGAGCCAGGGTCAGCCATCCTCAAGT
AGCTTAACAGGGGTTTCTATCTTCCCAACCCATACAACATCCTCAGCAGCAGCAGGGAATACAGCAGACAGCCCT
CCTCAACAGACAGTGCAGTATTCATTTTACAGACATCAACCTCCAGTGAGGCCACTACTGCACAGCCAGTGAGT
CAGCCTCAAGCTCCACAAGTCTTGCCCTCAAGTATCAGCTGGAAAACAGCTTCCAGTTTCCAGCCAGTACCACT
ATCCAAGGCGAACCTCAGATCCCAGTTGCGACACAACCCCTCGGTTGTTCAGTCCACTCTGGTGCTCATTTCCTT
CCAGTGGGACAGCCGCTCCCTACTCCCTTGTCTCCCTCAGTACCCTGTCTCTCAGATTCCCATATCAACTCCTCAT
GTGTCTACGGCTCAGACAGGTTTCTCATCCCTTCCCATCACAATGGCAGCTGGCATTACTCAGCCTCTGCTCAG
TTGGCTTCATCTGCTACAACAGCTGCGATCCCGGGGGTATCAACTGTGGTTCCTAGTCAGCTTCCAACCCCTCTG
CAGCCTGTGACTCAGCTGCCAAGTCAGGTTACCCACAGCTCCTACAACCAGCAGTTCAGTCCATGGGAATACCA
GCTAACCTTGGACAAGCTGCTGAGGTTCCACTTTCCTCTGGAGATGTTCTGTACCAGGGCTTCCCACCTCGACTG
CCACCACAGTACCCAGGAGATTCAAATATTGCTCCCTTCCAACGTGGCTTCTGTTTGCATCCATTCTACAGTC
CTATCCCCTCCCATGCCGACAGAAGTACTGGCTACAGCTGGGTACTTTCACAGTGGTGAGCTTATGTGGAA
TCAAATCTTTTAGTTTCTTATGGGTGGTGTAGGAGGACAGGTTCAAGTGTCCCAGCCAGGAGGGAGTTTACACAA
GCCCCACTAGCATCTCTCCAGCAAGCAGTTTGGAGAGTACTCAGGGAGTCTCTCAGGTTGCTCCTGCAGAGCCA
GTTGCAGTAGCACAGACCCAAGCTACCCAGCCGACCACTTTGGCTTCTCTGTAGACAGTGACATTTCAGATGTT
GCTTCAGGTATGAGTGATGGCAATGAGAAGCTCCCATCTTCCAGTGGAAGGCATGAAGGAAGAACTACAAAAACGG
CATTACCGAAAATCTGTAAAGGAGTCGCTCTCGACATGAAAAAAGTTCACGCCCAAAATTAAGAATTTTGAATGTT
TCAAATAAAGGAGACCGAGTAGTAGAATGTCAATTAGAGACTCATAATAGGAAAAATGGTTACATTCAAATTTGAC
CTAGATGGTGACAACCCCGAGGAGATAGCAACAATTATGGTGAACAATGACTTTATTCTAGCAATAGAGAGAGAG
TCGTTTGTGGATCAAGTTCGAGAAATTATTGAAAAAGCTGATGAAATGCTCAGTGAGGATGTCAGTGTGGAACCA

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FIGURE 3429B

GAGGGTGATCAGGGATTGGAGAGTCTACAAGGAAAGGATGACTATGGCTTTTCAGGTTCTCAGAAATTGGAAGGA
GAGTTCAAAACAACCAATTCTCGCTCTTCCATGCCACAGCAAATAGGCATTCTACCAGTTCTTTAACTCAAGTT
GTTCAATTCTGCGGGAAGGCGGTTTATAGTGAGTCCTGTGCCAGAAAGCCGATTACGAGAATCAAAAGTTTTCCCC
AGTGAAATAACAGATACAGTTGCTGCCTCTACAGCTCAGAGCCCTGGAATGAACTTGTCTCACTCTGCATCATCC
CTTAGTCTACAACAGGCCTTTTTCTGAACTTAGACGTGCCCAAATGACAGAAGGACCCAACACAGCACCTCCAAAC
TTTAGTCATACAGGACCAACATTTCCAGTAGTACCTCTTTCTTAAGTAGCATTGCTGGAGTCCCAACCACAGCA
GCAGCCACAGCACAGTCCCTGCAACAAGCAGCCCTCTAATGACATTTCCACATCAGTAATTAGTCTGAGGTT
ACAGTGCCCACTGAAGAGGGGATTGCTGGAGTTGCCACCAGCACAGGTGTGGTAACCTTCAGGTGGTCTCCCCATA
CCACCTGTGTCTGAATCACCAGTACTTTCCAGCGTAGTTTCAAGTATCACAATACCTGCAGTTGTCTCAATATCT
ACTACATCCCCGTCACCTTCAAGTCCCCACATCCACATCTGAGATCGTTGTTTCTAGTACAGCACTGTATCCTTCA
GTAACAGTTTCAGCAACTTCAGCCTCTGCAGGGGGCAGTACTGCTACCCCAAGTCTAAGCCTCCAGCTGTAGTA
TCTCAGCAGGCAGCAGGCAGCACTACTGTGGGAGCCACATTAACATCAGTTTCTACCACCACTTCATTCCCAAGC
ACAGCTTCACAGCTGTGCATTAGCTTAGCAGCAGTACTTCTACTCCTACTTTAGCTGAAACCGTGGTAGTTAGC
GCACACTCACTAGATAAGACATCTCATAGCAGTACAAGTGGATTGGCTTTCTCCCTCTCTGCACCATCTTCTCT
TCTCTCTGGAGCAGGAGTGTCTAGTTATATTTCTCAGCCTGGTGGGCTGCATCCTTTGGTCATTCCATCAGTG
ATAGCTTCTACTCTATTCTTCCCCAAGCAGCAGGACCTACTTCTACACCTTTATTACCCCAAGTACCTAGTATC
CCACCTTGGTACAGCCTGTGCAATGTGCCTGCTGTACAGCAGACACTAATTCATAGTCAGCCTCAACCAGCT
TTGCTTCCCAACCAGCCCCATACTCATTGTCTGAAGTAGATTCTGATACACAACCCAAAGCTCCTGGAATTGAT
GACATAAAGACTCTAGAAGAAAAGCTGCGGTCTCTGTTCAAGTGAACACAGCTCATCTGGAGCTCAGCATGCCTCT
GTCTCACTGGAGACCTCACTAGTCATAGAGAGCACTGTACACCAGGCATCCCAACTACTGCTGTTGCACCAAGC
AACTCCTGACTTCTACCACAAGTACTTGTCTACCACCAACCAATTTACCCTAGGAACAGTTGCTTTGCCAGTT
ACACCAGTGGTCACACCTGGGCAAGTTTCTACCCCAAGTCAGCACTACTACATCAGGAGTGAAACCTGGAACCTGCT
CCCTCCAAGCCACCTCTAACTAAGGCTCCGGTGCTGCCAGTGGGTACTGAACTTCCAGCAGGTACTCTACCCAGC
GAGCAGCTGCCACCTTTTCCAGGACCTTCTCTAACCCAGTCCCAGCAACCTCTAGAGGATCTTGATGCTCAATTG
AGAAGAACACTTAGTCCAGAGATGATCACAGTGACTTCTGCGGTTGGTCTGTGTCCATGGCGGCTCCAACAGCA
ATCACAGAAGCAGGAACACAGCCTCAGAAGGGTGTCTTCAAGTCAAAGAAGGCCCTGTCTAGCAACTAGTTCA
GGAGCTGGTGTTTTTAAGATGGGACGATTTTCAGGTTTCTGTTGCAGCAGACGGTGCCAGAAAGAGGGTAAAAAT
AAGTCAGAAGATGCAAAGTCTGTTCAATTTGAATCCAGCACCTCAGAGTCTCAGTGCTATCAAGTAGTAGTCCA
GAGAGTACCTTGGTGAAACAGAGCCGAATGGCATAACCATCCCTGGTATCTCTTCAGATGTGCCAGAGAGTGCC
CACAAAATACTGCCTCAGAGGCCAAAGTCAGACACTGGGCAGCCTACCAAGGTTGGACGTTTTTCAGGTGACAACT
ACAGCAAAACAAAGTGGGTCGTTTCTCTGTATCAAAAATAAGGACAAGATCACTGACACAAAGAAAGAGGACCA
GTGGCATCTCCTCTTTTATGGATTGGAACAAGCTGTTCTTCTGCTGTGATACCAAGAAAGAGAAGCCTGAA
CTGTACAGCCTTCACATCTAAATGGGCCGCTTCTGACCCGGAGGCCGCTTTTTTAAGTAGGGATGTGGATGAT
GGTTCCGGTAGTCCACACTCGCCCCATCAGCTGAGCTCAAAGAGCCTTCTAGCCAGAATCTAAGTCAAAGCCTT
AGTAATTCATTTAACTCCTCTTACATGAGTAGCGACAATGAGTCAGATATCGAAGATGAAGACTTAAAGTTAGAG
CTGCGACGACTACGAGATAAACATCTCAAAGAGATTGAGGACCTGCAGAGTCGCCAGAAGCATGAAATTGAATCT
TTGTATACCAAACTGGGCAAGGTGCCCCCTGCTGTTATTATTTCCCCAGCTGCTCCCCTTTCAGGGAGAAGACGA
CGACCCACTAAAAGCAAAGGCAGCAAATCTAGTCGAAGCAGTTCTTGGGGAATAAAAGCCCCCAGCTTTCAGGT
AACCTGTCTGGTCAGAGTGCAGCTTCAGTCTTGACCCCCAGCAGACCTCCACCTCCTGGCAACATCCCAGAG
TCCGGGCAGAAATCAGCTGTTACAGCCCCCTTAAGCCATCTCCCTCCAGTGACAACCTCTATTAGCCTTCCACAGT
GATGGTGCCATTTAGTACCAAGCCTTCTGCTCCAGGTCAAGGAACAGCAGCACAAACACTGTTGGGGCAACA
GTGAACAGCCAAGCCGCCCAAGCTCAGCCTCCTGCCATGACGTCCAGCAGGAAGGGCACATTACAGATGACTTG
CACAAGTTGGTAGACAATTGGGCCCCGAGATGCCATGAATCTCTCAGGCAGGAGAGGAAGCAAAGGGCACATGAAT
TACGAGGGCCCTGGAATGGCAAGGAAGTTCTCTGCACCTGGGCAACTGTGCATCTCCATGACCTCGAACCTGGGT
GGCTCTGCCCCCATCTCTGCAGCATCAGTCACTCTCTAGGTCACTTACCAAGTCTATGTGCCCCCACAGCAG
TATGGCTTTCCAGCTACCCCATTTGGCGCTCAATGGAGTGGGACGGGTGGCCAGCACCACAGCCACTTGGCCAG
TTCCAACCTGTGGGAACCTGCCTCCTTGACAGAATTTCAACATCAGCAATTTGCAGAAATCCATCAGCAACCCCCCA
GGCTCCAACCTGCGGACCACTTAG

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FIGURE 3430A

CGGCGGCGGCGGTAGTGGCGGCGGCGGCGGTGCCCGGGCGGCAGCGGCAGCAGTAGCGGCAGCCCTGAGGACGGT
GAGACGGCCGCGGCGGCGGCGGACAGCGCGGAAGTCGCGCGGGACCCAGAGCTTCCCCCTGTGCTAGTGTGCTGAG
GCTTTCGCCTTCTCTACCCAGCTTCTTGCTCACGGCCCCGGGTGGGCTGGGCAGGGCAACGCGCCCCCGGGCAGG
GGCGGAGCTGTAGATATGGTGTAAAGATACTTCTTCAAGATTGGACAGCTGGGGACCTTCTTCTGATTAACTTAA
ACCAACTTGTAGCCATAGAGACACCTCACAAGGTTCCCATTTTTTGTGTTGTTGTTGTTGTTGATTTTCTGCTCACAC
CTTCTCTGACCTTGCAACCATGATGGAAGTGCCCGCTCTGTTGGGAAGGTGGAGCCGAGCAGCCAGAGCCCTGG
GCGTTCACCCAGGCTTCCACGTTCCCTCGCTTGGGTACCGTTCGAACCAACAGTACGGGAGGGAGTTCGGGAAG
CAGTGTGGAGGTGGCAGTGGGAAAACCTTTCAATGGAATAATACAATCTTTAAATGCTGCCTATGCCACCTC
TGGCCCTATGTATCTAAGTGACCATGAAAATGTGGGTTGAGAAACACCTAAAAGCACCATGACACTTGGCCGTTT
TGGGGGACGTCTGCCTTACGGTGTTCGGATGACTGCTATGGGTAGTAGCCCCAATATAGCTAGCAGTGGGGTTGC
TAGTGACACCATAGCATTTGGAGAGCATCACCTCCCTCCTGTGAGTATGGCATCCACTGTACCTCACTCCCTTCG
TCAGGCGAGAGATAACACAATCATGGATCTGCAGACACAGCTGAAGGAAGTATTAAGAGAAAATGATCTCTTGCG
GAAGGATGTGGAAGTAAAGGAGAGCAAATTGAGTTCTTCAATGAATAGCATCAAGACCTTCTGGAGCCCAGAGCT
GAAGAAGGAACGAGCCCTGAGAAAAGATGAAGCTTCCAAAATCACCATTGGAAGGAACAGTACAGAGTTGTACA
GGAGGAAAACAGCACATGCAGATGACAATCCAGGCTCTCCAGGATGAATTGCGGATCCAGAGGGACCTGAATCA
GCTGTTTCAGCAGGATAGTAGCAGCAGGACTGGCGAACCTTGTGTAGCAGAGCTGACAGAGGAGAACTTTCAGAG
GCTTCATGCTGAGCATGAGCGGCAGGCCAAAGAGCTGTTTCTTCTTTCGAAAGACATTGGAGGAAATGGAGCTGCG
TATTGAGACTCAAAAGCAGACCCCTAAATGCTCGGGATGAATCCATTAAAGAAGCTTCTGGAAATGTTGCAGAGCAA
AGGACTTTCTGCCAAGGCTACCGAGGAAGACCATGAGAGAACAAGACGACTGGCAGAGGCAGAGATGCACGTTCA
TCACCTAGAAAAGCCTTTTGGAGCAGAAGGAAAAAGAGAACAGTATGTTGAGAGAGGAGATGCATCGAAGGTTTGA
GAATGCTCCTGATTCTGCCAAAACAAAAGCTCTGCAAACTGTTATTGAGATGAAGGATTCAAAAATTTCTCTAT
GGAGCGTGGGCTTCGAGACCTGGAAGAGGAAATTCAGATGCTGAAATCGAATGGTGCTTTGAGTACTGAGGAAAG
GGAAGAAGAAATGAAGCAAATGGAAGTGATCGGAGCCATTCTAAATTTATGAAAAATAAGATTGGCCAGGTGAA
ACAGGAGCTGTCCAGAAAGGACACAGAACTACTCGCCCTGCAGACAAAGCTAGAAACACTCACAAACCAGTTCTC
AGATAGTAAACAGCACATTGAAGTGTTGAAGGAGTCCTTGACTGCTAAGGAGCAGAGGGCTGCCATCCTGCAGAC
TGAGGTGGATGCTCTCCGATTGCGTTTGAAGAGAAGGAAACCATGTTGAATAAAAAGACAAAACAAATTCAGGA
TATGGCTGAAGAGAAGGGGACACAAGCTGGAGAGATACATGACCTCAAGGACATGTTGGATGTGAAGGAGCGGAA
GGTTAATGTTCTTCAGAAGAAGATTGAAAATCTTCAAGAGCAGCTTAGAGACAAGGAAAAGCAGATGAGCAGCTT
GAAAGAACGGGTCAAATCCTTGCAAGGCTGACACCACCAACACTGACACTGCCTTGACAACTTTGGAGGAGGCCCT
TGCAGAGAAAGAGCGGACAATTGAACGCTTAAAGGAGCAGAGGGACAGAGATGAGCGAGAGAAGCAAGAGGAAAT
TGATAACTACAAAAAGATCTTAAAGACTTGAAGGAAAAAGTCAGCCTGTTGCAAGGCGACCTTTCAGAGAAAGA
GGCTTCACTTTTGGATCTGAAAGAGCATGCTTCTTCTGTCATCCTCAGGACTGAAAAGGACTCACGGCTTAA
GACACTAGAGATTGCTTTGGAGCAGAAGAAGGAGGAGTGTCTGAAAATGGAATCACAATTGAAAAGGCACATGA
GGCAGCATTGGAAGCCAGAGCCAGTCCAGAGATGAGTGACCGAATACAGCACTTGGAGAGAGAGATCACCAGGTA
CAAAGATGAATCTAGCAAGGCCCAGGCAGAAGTTGATCGACTCTTAGAAATCTTGAAGGAGGTGAAAAATGAGAA
GAATGACAAAGATAAGAAGATAGCTGAGTTGGAAGTCTCACCTCAAGGCAAGTGAAGAGCCAGAAATAAGAAGGT
AGCAAATCTGAAGCACAAGGAACAGGTGGAAAAAAGAAGAGTGACAAATGTTAGAGGAGGCGCGACGACGGGA
GGACAATCTCAACGACAGCTCTCAGCAGTACAGGTGGAGGAGTTACTGATGGCCATGGAGAAGGTAAAGCAGGA
ACTAGAATCCATGAAAGCAAAGCTGTCTCCACCCAGCAGTCTCTGGCAGAAAAGGAACTCACTTGACTAATCT
TCGGGCAGAGAGAAGGAAACACTTAGAGGAAGTTCTGGAGATGAAGCAAGAGCTCTCTGGCTGCCATTAGTGA
AAAAGACGCCAATATAGCTCTCTTGGAGCTTTCGTCCTCTAAGAAGAAGACCAAGGAAGTGGCTGCCCTGAA
GCGGGAGAAGGATCGTCTGGTACAGCAGCTTAAGCAGCAGACGCAAAATCGAATGAAGCTAATGGCCGACAATA
CGAGGATGACCACCTTCAAATCCTCCCATTCCAATCAAACAAATCACAAGCCCTCCCCAGACAGGATGAGGAGGA
GGGTATATGGGCATAGCAATCAGAGGCTTAGTTACGCAATTTGTTTCAAGCATCATCCAGCCCCCTCTTAGAA
CTTGACCAAAATAGAAGTAAATTAAGTTGTACATTGGACACTGACAACCTCTGCCATGACCGAGACCCCTG
ATCCTCCGTGGACTCACTCCACCAGCTTCTATACTTGGACGATGACCAGGCGGCTTGGGAGAATGAGCTGCAG
AAGATGACCCGGGGGAGCTTCAAGGATGAGTTAGAGAAAAGTGAACGGGACAATGCAGAACTGCAGGAGTTTGCC
AACGCCATTCTTCAGCAGATAGCAGACCATTTGTCGGACATCCTAGAGCAAGTGGTCAACGCCCTGGAAGAGTCC

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FIGURE 3430B

TCTTGACCCTGCTTTATGGGGAAGCCTGAGGTAGTCAACCCAGGAGCCAAGAAAAGAGAAGTACGAGGAACAGGT
GCCCCGAACCTTCTTGGCACCAAACTACAACTTCATCCCAACTTGCTCACTTGAAGAAGTGTGATTCCAGCA
CCGTTTCTACATCTGCCATCTTACTCTGCCTTTCTGCTTTGGATGTGGTCTCTACACTAACCTTCTTGATGTCCA
GGGTAGATAAAGGGTCGAATCTCTCTGAAGAAGTCCACCTGGTCATCAGCAGTGGAGAAGTGTGGGAGCTGGTG
GCTCTGCCCTGACAGAGAGCCATGGAGCAGAGGAGCCTCTCACCTCCTGTCTCTGACATGAGAATGAAACCAGG
AATGGACTTGGAGTTCAACAGGCTGAGAGGATGCCTCCAATGGACCAGAGAGCTGAGTGTTCTAATATCACAATA
GGTGCTTTCTCCTAAAAGGGCAAAAAACAATCTCAAAAAGATTAGAAAAAGAGAAGGGGGGAAGGGAAGAGAAAA
TCGACTCTTCTTTTACTGTCTCTTCTGCTTACTTTCCACATGAGATGCTTTGTACCGGGGAGCTGTGAGCAGGC
CTCACGATGGCTTGGGAGCACTCGTTCTCCCAAGGTCTGAGTCTTCATCCAGCCCTGCCTGTCTGTGCGCAGCCTT
CCTCACTCTGTTCTCGGCCAGTTAACAAGAAGATGGTGTGAGGTGTTCTCCACCAGTCTCTCCTGTTTGAGACT
GTTGACGTTATCATACTGAGGTGTTAGATCAAATATCTCTAATTGAAGAACATGTGAGGTTGAAAGAGCACCAGC
CAGGGCAACATAGCGTGACCCTGTCTCTACAAAAAATTAAAAAGAGAACATACAAAGTTGACATATGAGACCCTG
TTGTCCCCGCTGCAGCTTTGCCCCAGTAACAGATGCCCCGTTGCTCTTGGGCTGGTTTTCCCTGAACACCTCCAA
GAGGCTGCCCTGCCCTTGCCAGCACCCGTGTCCTGAGCTCCTGCAGCCCAGTGGCTGCTGAAGTTGTGATCCCTCAC
TCACCTGCTAGCTTTGCCCTTGACTCGTCTTCTCTGAACCTCAGCCTCGTGCATTGCCTGGAACCTTCTTCTAG
CATAAATGAAGGTTTTTCTCTACACACATTCTTCTCGGTTATTTTATTTCAGAGAATATTTATGAAATGCCT
ACTGTGTGCAAGTCATCCATCCTTGAAAAGGCCACTTCTCAGTGAGGGAGAGATGTAGTGGATTCTGTGAGACAT
ACCTGCTGGAGTTGAAGCAGTAAATAGCATGTCTTCCCTCCCCGATCTTAAGGTGTGTTTTCTAGA

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FIGURE 3431

MYGSARSVGKVEPSSQSPGRSPRLPRSPRLGHRRTNSTGGSSGSSVGGGSGKTLSMENIQSLNAAAYATSGPMYLS
DHENVGSETPKSTMTLGRSGGRLPYGVRMTAMGSSPNIASSGVASDTIAFGEHHLPPVSMASVPHSLRQARDNT
IMDLQTQLKEVLRENDLLRKDVEVKESKLSSSMNSIKTFWSPELKKERALRKDEASKITIWKEQYRVVQEEHQHM
QMTIQALQDELRIQRDLNQLFQQDSSSRTEGPCVAELTEENFQRLHAEHERQAKELFLRKTEEMELRIETQKQ
TLNARDESICKLLEMLQSKGLSAKATEEDHERTRRLAEAEHVHHLLESLEQKEKENSMLREEMHRRFENAPDSA
KTKALQTVIEMKDSKISSMERGLRDLEEEIQMLKSNGALSTEEREEEMKQMEVYRSHSKFMKNKIGQVKQELSRK
DTELLALQTKLETLTNQFSDSKQHIEVLKESLTAKEQRAAILQTEVDALRLRLEEKETMLNKKTKQIQDMAEEKG
TQAGEIHDLDKMLDVKERKVNVLQKKIENLQEQLRDKEKQMSLKERVKSLQADTTNTDTALTLEALAEKERT
IERLKEQRDRDEREKQEEIDNYKKDLKDLKEKVSLLQGDSEKEASLLDLKEHASSLASSGLKKDSRLKTLLEIAL
EQKKEECLKMESQLKKAHEAALEARASPEMSDRIQHLEIREITRYKDESSKAQAEVDRLEILKEVENEKNDKDKK
IAELESLSRQVKDQNKKVANLKHKEQVEKKKSAQMLEEARREDNLNDSSQQLQVEELLMAMEKVKQEELESMA
KLSSTQQSLAEKETHLTNLRAERRKHLEEVLEMKQEALLAAISEKDANIALLELSSSKKKTQEEVAALKREKDR
VQQLKQQTQNRMKLMADNYEDDHFKSSHSNQTNHKPSPDQDEEEGIWA

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FIGURE 3432

TATTCTTCCAAATGGAACTGCTAATTTTTGAAGCAGAAGGTTGACAGCTTCAGTAAGATCTCAAGAGAGCGAGA
AGACTGGAATCAGGGAACCTACTCTGGAACTGTCAGTCCCAGGGCACTGGGGAGGGCTGAGGCCGACCATGCC
CAGCCTGCTGCTGCTGTTACGGCTGCTCTGCTGTCCAGCTGGGCTCAGCTTCTGACAGACGCCAACTCCTGGTG
GTCATTAGCTTTGAACCCGGTGCAGAGACCCGAGATGTTTATCATCGGTGCCAGCCCGTGTGCAGTCAGCTTCC
CGGGCTCTCCCTGGCCAGAGGAAGCTGTGCCAATTGTACCAGGAGCACATGGCCTACATAGGGGAGGGAGCCAA
GACTGGCATCAAGGAATGCCAGCACCAAGTTCCGGCAGCGGCGGTGGAATTGCAGCACAGCGGACAACGCATCTGT
CTTTGGGAGAGTCATGCAGATAGGCAGCCGAGAGACCGCCTTACCCACGCGGTGAGCGCCGCGGGCGTGGTCAA
CGCCATCAGCCGGGCTGCCGCGAGGGCGAGCTCTCCACCTGCGGCTGCAGCCGACGGCGCGGGCCAAAGGACCT
GCCCCGGGACTGGCTGTGGGGCGGCTGTGGGGACAACGTGGAGTACGGCTACCGCTTCGCCAAGGAGTTTGTGGA
TGCCCGGGAGCGAGAGAAGAACTTTGCCAAAGGATCAGAGGAGCAGGGCCGGGTGCTCATGAACCTGCAAAACAA
CGAGGCCGGTTCGAGGGCTGTGTATAAGATGGCAGACGTAGCCTGCAAATGCCACGGCGTCTCGGGGTCTTCGAG
CCTCAAGACCTGCTGGCTGCAGCTGGCCGAGTTCCGCAAGGTGCGGGACCGGCTGAAGGAGAAGTACGACAGCGC
GGCCGCCATGCGCGTCAACCGCAAGGGCCGGCTGGAGCTGGTCAACAGCCGCTTACCCAGCCCACCCCGGAGGA
CCTGGTCTATGTGGACCCAGCCCCGACTACTGCCTGCGCAACGAGAGCACGGGCTCCCTGGGCACGCAGGGCCG
CCTCTGCAACAAGACCTCGGAGGGCATGGATGGCTGTGAGCTCATGTGCTGCGGGCGTGGCTACAACCAGTTCAA
GAGCGTGCAGGTGGAGCGCTGCCACTGCAAGTTCCACTGGTGCTGCTTCGTGAGGTGTAAGAAGTGCACGGAGAT
CGTGGAACAGTACATCTGTAAATTAGCCCGAGGGCCTGCTCCCGGCCCCCTGCACTCTGCCTCACAAAGGTCTA
TATTATATAAATCTATATAAATCTATTTTATATTTGTATAAGTAAATGGGTGGGTGCTATACAATGGAAAGATGA
AAATGGAAAGGAAGAGCTTATTTAAGAGACGCTGGAGATCTCTGAGGAGTGGACTTTGCTGGTTCTCTCCTCTTG
GTGGGTGGGAGACAGGGCTTTTTCTCTCCCTCTGGCGAGGACTCTCAGGATGTAGGGACTTGGAATATTTACTG
TCTGTCCACCACGGCTGGAGGAGGGAGGTTGTGGTTGGATGGAGGAGATGATCTTGTCTGGAAGTCTAGAGTCT
TTGTTGGTTAGAGGACTGCCTGTGATCCTGGCCACTAGGCCAAGAGGCCCTATGAAGGTGGCGGGAACCTCAGCTT
CAACCTCGATGTCTTCAGGGTCTTGTCCAGAATGTAGATGGGTTCCGTAAGAGGCCTGGTGCTCTCTTACTCTTT
CATCCACGTGCACTTGTGCGGCATCTGCAGTTTACAGGAACGGCTCCTTCCCTAAAATGAGAAGTCCAAGGTCAT
CTCTGGCCCACTGACCACAGAGAGATCTGCACCTCCCGGACTTCAGGCCTGCCTTTCAGCGAGAATCTTTCATC
CTCCACGGTTCACTAGCTCCTACCTGAAGAGGAAAGGGGGCCATTTGACCTGACATGTGAGGAAAGCCCTAACT
GAATGTTTGCCTGGGCTGCAGAAGCCAGGGTGCATGACCAGGCTGCGTGGACGTTATACTGTCTTCCCCACC
CCCGGGGAGGGGAAGCTTGAGCTGCTGCTGTCACTCCTCCACCGAGGGAGGCCTACAAACCACAGGACGCTGCA
ACGGGTGAGGCTGGCGGGCCCGGCGTGCTCATCATCTCTGCCCCAGGTGTACGGTTTCTCTGTGACATTAAATGC
CCTTCATGG

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FIGURE 3433

MPSLLLLFTAALLSSWAQLLTDANSWWSLALNPFVQRPEMFIIGAQPVCSQLPGLSPGQRKLCQLYQEHMAYIGEG
AKTGIKECQHQRQRRWNCSTADNASVFGRVMQIGSRETAFTHAVSAAGVVNAISRACREGELSTCGCSRTARPK
DLPRDWLWGGCGDNVEYGYRFAKEFVDAREKKNFAKGSEEQGRVLMNLQNEAGRRAVYKMADVACKCHGVSGS
CSLKTCWLQLAEFRKVGDRLEKEYDSAAAMRVTRKGRLELVNSRFTQPTPEDLVYVDPSPDYCLRNESLGTQ
GRLCNKTSEGMDGCELMCCGRGYNQFKSVQVERCHCKFHWCCFVRCKKCTEIVDQYICK

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FIGURE 3434

GACCATTAGCAGGCACCCAGGCCTGTCTTTGGCTCGGAAACGGTGGCCCCAATGTAGCCTAGTTTGAACCTAGG
 AACTGCAGGACCAGAGAGATTCCACTGGAGCCTGATGGACGGGTGACAGAGGGAACCTACTCTGGAAACTGTCA
 GTCCAGGGCACTGGGGAGGGCTGAGGCCGACCATGCCAGCCTGCTGCTGCTGTTACGGCTGCTCTGCTGTCC
 AGCTGGGCTCAGCTTCTGACAGACGCCAACTCCTGGTGGTCATTAGCTTTGAACCCGGTGCAGAGACCCGAGATG
 TTTATCATCGGTGCCAGCCGTGTGCACTCAGCTTCCCGGGCTCTCCCTGGCCAGAGGAAGCTGTGCCAATTG
 TACCAGGAGCACATGGCCTACATAGGGGAGGGAGCCAAGACTGGCATCAAGGAATGCCAGCACCAGTTCCGGCAG
 CGGCGGTGGAATTGCAGCACAGCGGACAACGCATCTGTCTTTGGGAGAGTCATGCAGATAGGCAGCCGAGAGACC
 GCCTTACCCACGCGGTGAGCGCCGCGGGCGTGGTCAACGCCATCAGCCGGGCCTGCCGCGAGGGCGAGCTCTCC
 ACCTGCGGCTGCAGCCGGACGGCGCGGCCCAAGGACCTGCCCCGGGACTGGCTGTGGGGCGGCTGTGGGGACAAC
 GTGGAGTACGGCTACCGCTTCGCCAAGGAGTTTGTGGATGCCCGGGAGCGAGAGAAGAAGCTTTGCCAAAGGATCA
 GAGGAGCAGGGCCGGGTGCTCATGAACCTGCAAAACAACGAGGCCGGTTCGAGGGCTGTGTATAAGATGGCAGAC
 GTAGCCTGCAAAATGCCACGGCGTCTCGGGGTCTGCAAGCCTCAAGACCTGCTGGCTGCAGCTGGCCGAGTTCCGC
 AAGGTCGGGGACCGCTGAAGGAGAAGTACGACAGCGCGGCCGCCATGCGCGTCACCCGCAAGGGCCGGCTGGAG
 CTGGTCAACAGCCGCTTACCCAGCCACCCCGGAGGACCTGGTCTATGTGGACCCAGCCCCGACTACTGCCTG
 CGCAACGAGAGCACGGGCTCCCTGGGCACGAGGGCCGCTCTGCAACAAGACCTCGGAGGGCATGGATGGCTGT
 GAGCTCATGTGCTGCGGGCGTGGCTACAACCAGTTCAAGAGCGTGCAGGTGGAGCGCTGCCACTGCAAGTTCCAC
 TGGTGTGCTTTCGTCAGGTGTAAGAAGTGCACGGAGATCGTGGACCAGTACATCTGTAAATAGCCCGGAGGGCCT
 GCTCCCGGCCCCCTGCACTCTGCCTCACAAAGGTCTATATTATATAAATCTATATAAATCTATTTTATATTTGT
 ATAAGTAAATGGGTGGGTGCTATACAATGGAAGATGAAAATGGAAGGAAGAGCTTATTTAAGAGACGCTGGAG
 ATCTCTGAGGAGTGGACTTTGCTGGTTCTCTCTTGGTGGGTGGGAGACAGGGCTTTTTCTCTCCCTCTGGCG
 AGGACTCTCAGGATGTAGGGACTTGGAAATATTTACTGTCTGTCCACCACGGCCTGGAGGAGGGAGGTTGTGGTT
 GGATGGAGGAGATGATCTTGTCTGGAAGTCTAGAGTCTTTGTTGGTTAGAGGACTGCCTGTGATCCTGGCCACTA
 GGCCAAGAGGCCCTATGAAGGTGGCGGGAACCTCAGCTTCAACCTCGATGTCTTCAGGGTCTTGTCCAGAATGTAG
 ATGGGTTCCGTAAGAGGCCTGGTGCTCTCTTACTCTTTTCATCCACGTGCACTTGTGCGGCATCTGCAGTTTACAG
 GAACGGCTCCTTCCCTAAAATGAGAAGTCCAAGGTCATCTCTGGCCAGTGACCACAGAGAGATCTGCACCTCCC
 GGACTTCAGGCCTGCCTTTCCAGCGAGAATTCTTCATCCTCCACGGTTCCTAGCTCCTACCTGAAGAGGAAAGG
 GGGCCATTTGACCTGACATGTGAGGAAAGCCCTAAACTGAATGTTTGCCTGGGCTGCAGAAGCCAGGGTGCAT
 GACCAGGCTGCGTGGACGTTATACTGTCTTCCCCACCCCCGGGGAGGGGAAGCTTGAGCTGCTGCTGTACTCC
 TCCACCGAGGGAGGCCTCACAAACCACAGGACGCTGCAACGGGTGAGGCTGGCGGGCCCGGCGTGTCTCATCTCT
 CTGCCCCAGGTGTACGGTTTCTCTCTGACATTAAATGCCCTTCATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 A

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FIGURE 3435

MPSLLLLFTAALLSSWAQLLTDANSWWSLALNPVQRPEMFIIGAQPVCSQLPGLSPGQRKLCQLYQEHMAYIGEG
AKTGIKECQHQRQRRWNCSTADNASVFGRVMQIGSRETAFTHAVSAAGVVNAISRACREGELSTCGCSRTARPK
DLPRDWLWGGCGDNVEYGYRFAKEFVDAREKKNFAKGSEEQGRVLMNLQNEAGRRVYKMAADVACKCHGVSGS
CSLKTCWLQLAEFRKVGDRLEKEYDSAAAMRVTRKGRLELVNSRFTQPTPEDLVYVDPSPDYCLRNESTGSLGTQ
GRLCNKTSEGMDGCELMCCGRGYNQFKSVQVERCHCKFHWCCFVRCKKCTEIVDQYICK

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FIGURE 3436

GTATGGGAAGGTCGGTGGCGAGTGATCCCTCATGATGTACTACCAGACTGGCTCAAGGATAATGACTTCCTCTTG
CATGGACACCGGCTCCTATGCCTTCTTTCCGGGCTGTTTAAAGAGCATTTTCAGAATACACACAGAAACAGGC
AACATTTGGACACATCTCTTAGGTTGTGTATTCTTCCGTGTGCCTGGGGATCTTTTATATGTTTCGCCCAAATATC
TCCTTTGTGGCCCTCTGCAAGAGAAGGTGGTCTTTGGATTATTTTCTTAGGAGCCATTCTCTGCCTTTCTTTT
TCATGGCTCTTCCACACAGTCTACTGCCACTCAGAGGGGTCTCTCGGCTCTTCTCTAAACTGGATTACTCTGGT
ATTGCTCTTCTGATTATGGGAAGTTTTGTTCTTGGCTTTATTATTCTTCTACTGTAATCCACAACCTTGCTTC
ATCTACTTGATTGTCTGTGTGCTGGGCATTGCAGCCATTATAGTCTCCAGTGGGACATGTTTGCCACCCCT
CAGTATCGGGAGTAAGAGCAGGAGTGTTCCTTGGGCTAGGCCTGAGTGAATCATTCTACCTTGCACTATGTC
ATCTCGGAGGGGTTCTTAAGGCCGCCACCATAGGGCAGATAGGCTGGTTGATGCTGATGGCCAGCCTCTACATC
ACAGGAGCTGCCCTGTATGCTGCCCGGATCCCCGAACGCTTTTCCCTGGCAAATGTGACATCTGGTTTCACTCT
CATCAGCTGTTTCATATCTTTGTGGTTGCTGGAGCTTTTGTTCACCTCCATGGTGTCTCAAACCTCCAGGAGTTT
CGTTTCATGATCGGCGGGGCTGCAGTGAAGAGGATGCACTGTGATACCTACCAGTCTCCAGGGACTATGACCCCT
AAACCAGGGCCTGCGGCACCTTGCGGGCTCCCTGCTGGCTACTGATGCCAGTACCAGAGGAGCCCCAAAACCTTTG
ACAGCCTCGTGGGCTTTGTGACGGCCAGTGGCTCTGCGTGGTACATGACTGAGAAGAGAAAAACAAAAATAAAT
CATACCTCAAAGGATGGAGTGCATCAATTGGGAGAAAAGGAGACATAGCCCAAACCTGGCTTATTCTTGGGATC
TACTGATTGCGGGCTCTGCAAGACCTTGGCAAACCTGGCTTCTGATCCATATCATATTTATTGTAGAAGATGGC
GAAACAGTTTAGCTGGTGGTTCTTTCTTCTCCCTTTCTCTCTCTATGACAATAATACAAACCAATTTAAGTGA
ACATTTATATCCGATAAGGGGTGGGAGTGTGATTTTAAATGCTCTTTTGGGAGAACAAAGAAATTAATGTAAATA
AGATTTCTAACTGTTTAAATAAGACTTTATATAAATGTTTAAACATAGGGGTAAAGGAGGGAGGGAGAATTTT
GTATAGAATGAAACATGCAAGTACCACACACTGTTTGAATTTTGACAAAAAGTGACTGTAGGATCAGGTGATAG
CCCCGGAATGTACAGTGTCTTGGTGCACCAAGATGCCTTCTAAAGGCTGACATACCTTGGACCCTAATGGGGCAG
AGAGTATAGCCCTAGCCAGTGGTGACATGACCACTCCCTTTGGGAGGCTGAGGTAGAGGGAGTGGTATGTGT
TTTCTCAGTGAAGCAGCACATGAGTGGGTGACAGGATGTTAGATAAAGGCTCTAGTTAGGGTGTCAATTGTCATT
TGAGAGACTGACACACTCCTAGCAGCTGGTAAAGGGGTGCTGGAGGCCATGGAGGAGCTCTAGAAACATTAGCAT
GGGCTGATCTGATTACTTCTTGGCATCCCGCTCACTTTTATGGGAAGTCTTATTAGAGGGATGGGACAGTTTCC
ATATCCTTGCTGTGGAGCTCTGGAACACTCTCTAAATTTCCCTCTATTAAAAATCACTGCCCTAACTACACTTCC
TCCTTGAGGGAATAGAAATGGACCTTTCTCTGACATAGTTCTTGGCATGGGAGCCAGCCACAAATGAGATTCTGA
CGTGTCCAGGTTTCTCCTGAGCTCATCTACATAGATTGGTAGACCCTTCTTTGGATTAGGAAAGATGAGTTTGA
CCTCTGGTACACTGTCTTGGTAAGCCTGGATGTGACAGACACCTCGGCTCTCCTTGAATAAGAAAGCCAGCAGAA
CTCTTAAAGCCAGTTGTAGTACGGAGTTGTGAGCACTCACTGAACCTCACTTTACAGGGATAAGAGTGGTGTGGC
ATTTTAAATACAATGGTATGTTATTGCCAGGGAGTGAGGTACAAGACGATGGCTCATGTACAGGCCCTACCTGAT
ACGGTGTGACAGAAAGTGGTGGGAAAGGATCTGGTTCATGGAATTCGATCTTGGCCCATAGGTGAACCACCAA
AATAGTGCTCGAGTCTTAGGTTACTGTCAATCAAGACTTGGGATGACTCCATTATATCCTGGGGTTGTGGGTATT
AGAATAAATATGGAGGCTCTGAGCATGGGGACTGGCGTCTCAGTAGGTGTTTGGGAATATGGGAAGGGTCTCC
TATTTATTCAATAGAGTTTCTCAGTTATTTTCCCTTGCCTTGCAATCTCCAGCAAAAGGTGGGATCTAGG
AAGAAAGAATCCAGTGTAGAAGTTGAGAAGAACTTGAACGTTTTTGGTCTGGATAAGGTCACTGTCTAGGTGCT
AGGTGGACCGAGCAAAAGACTCAGTGGATGAACCTGGTGAGTGCCTGACAGAATAAAGAACAGTATTAATCCCTT
TGAGAAAGCATAGTCCAGCAGGACAGTGGCCATTTGGACAGAAGCCCACTTAGTTTCTTGGGAGCAACAGCACGT
ATCAGAAGCCAGACTTGCTCTTCCGTCACTACCCACACCCCAAGCTGGAAGGATCTGGTTCAACATAGCACAAACCC
CAGAAGTAGCAGCCTCTGGGTGCAGTCAACCCACACCCCAAGCTGGAAGGATCTGGTTCAACATAGCACAAACCC
TTAGGAAAAATGAAATTAACATCACTGATGTGTAATCCAGTAAATCTCCCTTTTTCGGGTGTGTATGTGGGCAT
GTGCCATTCTATGTGTGTCTACGTGCAGCTCACTACCAACAGCCTCATGTGCACTTGACCTGACAGTGTCTC
GCTGAGAACTCTCACCAGGTTGGCGCCTGAATGCCTTACTCTCAGCAGTCAGAGGCTTGCTTGCTGTGTGAGAT
TTTTAATTTCTTTTGGCCCTAGGCTGGTTGGGACCTCTACAGCTTCATTCTTTACCATTAAATAGTGGCCT
TTTTAGTATTTTCCCTCTTCCCTTTTATAAATTATGCTAAAGCCACAAAGCACATTTTGGGGATCATAGAAGG
TTGGGGTTCCAGAAAGGCATCTGTGTGATGGTTCCATTGATGTGGGATTTCCCTACTTGCTGTATTCTCAGTTTC
TAATAAAAAGAACCAAATG

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FIGURE 3437

TGCGAGGCAGCTCGCTCGTTCTGCGATCTATTGAGAGTGGCTTCCAAGAGCCCCGTGCCTATGTCTGGGAGGGAG
GGAAGATGGCAGCCGTGGCGGCAGGCGGCTGGTGGGAAAGGGGCGCGACATCAGCCTAGCGGCCCTGCAGCGCC
ACGACCCCTATATCAACCGCATCGTGGACGTGGCCAGCCAGGTGGCTCTGTACACCTTCGGCCATCGGGCCAACG
AGTGGGAGAAAACCTGATGTGGAAGGAACCTTATTTGTTTATACAAGGTCTGCTTCTCCAAAGCATGGATTACCA
TTATGAATAGGCTGAGCATGGAAAATAGGACAGAACCTATTACTAAAGACTTGGATTTCCAACTCCAGGACCCTT
TCCTTCTCTACAGAAATGCCAGATTGTCCATCTATGGAATTTGGTTTTATGATAAGGAAGAATGCCAAAGAATTG
CAGAGCTTATGAAAAACCTAACTCAGTATGAACAGTTGAAAGCCCATCAGGGAACCTGGAGCAGGAATTTCCCCAG
TGATCCTCAATTCAGGAGAGGGCAAAGAAGTAGACATTTTACGAATGCTCATCAAGGCCAAAGACGAATACACAA
AGTGTAACCTGTTCTGAGCCAAAAAGATAACCAGTTCTCTGCCATCTATGACAATCCAAATCTCATCAAAC
CAATTCAGTGAAACCCAGTGAAACCCAGCAACAGCGTATACCTCAGCCCAACCAGACCTTAGACCCTGAACCC
AACACTTATCCTTGACAGCTCTGTTTGGGAAGCAGGACAAAGCTACATGTCAGGAAACTGTGGAGCCTCCGCAGA
CTCTCCACCAGCAGCAGCAGCAGCAGCAGCAGCAGCAAGAGAAGCTTCCAATTAGGCAGGGGGTTGTACGCTCCC
TGTCCTATGAGGAAQCCAGAAGACACTCACCCCCATTGAGAAGCAGCTCTGTCCAGCCATTGAGAACTCATGG
TCAGGAGCGCAGACCTCCACCCATTGTCAGAGCTGCCTGAAAACCGGCCTTGTGAAAATGGCAGTACCCATTCTG
CGGGAGAATTTTTTACAGGACCTGTCCAGCCAGGGTCTCCTCACAACATTGGAACCTTCTCGTGGTGTACAAAATG
CTTCCAGAACTCAGAACCTGTTTCGAGAACTTCAGAGTACCCAGGGGCAGCAACAAGTGTGACCCTAGTACAC
CAGCACCTGCCAGCTCAGCTGCCCTGAACCGCAGCAGAGCTCCCACTTCTGTACCCCTGTGGCTCCAGGAAAGG
GTCTGGCTCAGCCACCACAGGCCTATTTCAATGGCTCCCTTCCACCTCAGACAGTAGGACATCAGGCTCATGGAA
GAGAACAGTCCACACTCCCAAGACAAACACTCCCCATCTCTGGTAGTCAGACTGGCAGCTCTGGAGTGATCTCCC
CTCAAGAGTTACTGAAGAAGCTTCAGATTGTACAGCAGGAGCAGCAGCTGCATGCCTCTAACCGGCCAGCCTTGG
CCGCTAAGTTTCTGTGCTCGCTCAGAGCTCTGGAACAGGGAAACCTTGGAACTCTGGATCAACAAGACACCCA
ACACAGAACAGCAGACTCCTCTTTTCCAGGTCTCTCAGCTCAGCGCATCCCTGCTACAGCAGCTCCGTCTCTGC
TTATGTCCCCCATGGTGTTCGCACAACCCACCTCCGTCCCGCCAAAGGAAAGGGAGAGCGGCCTCTTGCCCTGTGG
GAGGCCAGGAGCCACCTGCTGCTGCCACCAGCCTCCTCCTGCCCATACAGAGCCCGGAGCCCTCCGTGATACCA
GCAGCCCACTCACCAAGCTCCAGCTCCAGGAGGCACTGCTGTACCTCATTGAGAATGATGACAACTTCTTAAATA
TAATCTATGAAGCCTATCTCTTCAGCATGACTCAAGCAGCCATGAAAAAGACTATGTGACAGCAAGGCCTTTTAA
AACTGATTTTCAAGGTCTTCTAGAACTCCGGCACAAGGTTCTTTTATGTTGAGTGTGTTTCTTCAATGTTTC
TGCCTTTTTTAAAAAAAAGTATGTGTAATATGAAGTAAAATGTTTCAGACTTTTTTTTAT

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FIGURE 3438

MAAVAAGGLVGKGRDISLAALQRHDPYINRIVDVASQVALYTFGHRANEWEKTDVEGTLFVYTRSASPKHGFTIM
NRLSMENRTEPITKDLDLQDPFLLYRNARLSIYGIWFYDKEECQRIAEMLMKNLTQYEQLKAHQGTGAGISPMI
LNSGEGKEVDILRMLIKAKDEYTKCKTCSEPKKITSSSAIYDNPNIKPIPVKPSNQQRIPQPNQTLDPQPH
LSLTALFGKQDKATCQETVEPPQTLHQQQQQQQQQQEKLPIRQGVVRSLSYEEPRRHSPPIEKQLCPAIQKLMVR
SADLHPLSELNRPENRPCENGSTHSAGEFFTGPVQPGSPHNIGTSRGVQNASRTQNLFEKLQSTPGAANKCDPSTPA
PASSAALNRSRAPTSVTPVAPGKGLAQPPQAYFNGSLPPQTVGHQAHGREQSTLPRQTLPISGSQTGSSGVISPO
ELLKKLQIVQQEQQLHASNRPALAAKFPVLAQSSGTGKPLESWINKTPNTEQQTPLFQVISQORIPATAAPSLLM
SPMVFAQPTSVPPKERESGLLPVGGQEPPAAATSLLLPIQSPEPSVITSSPLTKLQLEALLYLIQNDDNFI
YEAYLFSMTQAAMKKT

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FIGURE 3439

GCCGCGTGAGAGGTGCTCAAGCCTCCTCGCGGTCCGAGTCAGTGCCGCGCGCCCGGCCCTCCCGCACGCCCCG
CAGGTAGCGCCCCCGCCCGCGGCCAGAGTGCGCTCGCGCCGGCACCAGCTCCCGGATAAACGGCGCGCCGCGCG
GAGATGACAGCCGAGGAGATGAAGGCGACCGAGAGCGGGGCGCAGTCGGCGCCGCTGCCCATGGAGGGAGTGAC
ATCAGCCCCAAACAGGACGAAGGCGTGCTGAAGGTCATCAAGAGAGAGGGGCACAGGTACAGAGATGCCATGATT
GGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGTCTGGATCGCAAG
GACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTATCAAGGCTTGGGACATTGCCATAGCCACCATGAAGGTG
GGGGAGGTGTGCCACATCACCTGCAAACCAGAATATGCCTACGGTTCAGCAGGCAGTCCCTCAAAGATTCCCCC
AATGCCACGCTTGATTTTGAGGTGGAGTTGTTTGAGTTTAAGGGAGAAGATCTGACGGAAGAGGAAGATGGCGGA
ATCATTGCGAGAATACAGACTCGCGGTGAAGGCTATGCTAAGCCCAATGAGGGTGCTATCGTGGAGGTTGCACTG
GAAGGGTACTACAAGGACAAGCTCTTTGACCAGCGGGAGCTCCGCTTTGAGATTGGCGAGGGGGAGAACCTGGAT
CTGCCTTATGGTCTGGAGAGGGCCATTGAGCGCATGGAGAAAGGAGAACATTCCATCGTGACTCAAGCCCAGC
TATGCTTTTGGCAGTGTTGGGAAGGAAAAGTTCCAAATCCACCAAATGCTGAGCTGAAATATGAATTACACCTC
AAGAGTTTGAAGAGGCCAAGGAGTCTTGGGAGATGAATTGAGAAGAGAAGCTGGAACAGAGCACCATAGTAAA
GAGCGGGGCACTGTGTACTTCAAGGAAGGTAAATACAAGCAAGCTTTACTACAGTATAAGAAGATCGTGCTTGG
CTGGAATATGAGTCTAGTTTTTCCAATGAGGAAGCACAGAAAGCACAGGCCCTTCGACTGGCCTCTACCTCAAC
CTGGCCATGTGTCTATCTGAACTACAGGCCTTCTCTGCTGCCATTGAAAGCTGTAACAAGGCCCTAGAACTGGAC
AGCAACAACGAGAAGGGCCTCTTCGCGCGGGGAGAGGCCACCTGGCCGTGAATGACTTTGAACTGGCACGGGCT
GATTTCCAGAAGGTCTCTGAGCTCTACCCCAACAACAAGCCGCCAAGACCCAGCTGGCTGTGTGCCAGCAGCGG
ATCCGAAGGCAGCTTGCCCGGGAGAAGAAGCTCTATGCCAATATGTTTGAGAGGCTGGCTGAGGAGGAGAACAAG
GCCAAGGCAGAGGCTTCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGCAGAAGAGCAACACGGCA
GGGAGCCAGTCTCAGGTGGAGACAGAAGCATAGCCCCCTCTCCACCAGCCCTACTCCTGCGGCTGCCCTGCCCCCA
GTCTCCCCACTCCACCCTGTAGTTTTGTAAAACTGAAGAATTTTGAGTGAATTAGACCTTTATTTTTCTATCT
GGTTGGATGGTGGCTTTAGGGGAAGGGGGAAAGGTGTAGGCTGGGGGATTGAGGTGGGGAATCATTTTAGCTGGT
GTCAGCCCCCTCTTCCCTTCTCTCATTGACATGAACATATGTCCATCCATATATATTATCAGAAATGTTAATTTA
TTTTGCTCCCTCTGTAGGTCCATTTTCTAAGGGTAGAAGAGGCAAGTGGTAGGGATGAGGTCTGATAAGAACCC
AGGGTGGAGAGGGGAGACTCCTGGGCAGCCGTTTTCTCATCCTTTCCCTCTCCCAGTCCATTTCCAAATGTGGCC
TCCATGTGGGTGCTAGGGACATGGGAAAAACCACTGCTATGCCATTTCTTCTCTGTGTCCCTTCTCACCCCCG
ACGGTGTGGCTGATGATGTCTTCTGGTGTCTGTTGACCACCCCTGTTCCCTGTTCTGGTATTTCCCTGTCTAG
TTTCCCTCTCGGCCAGGTGTGTCTCCAAAATCCCTCAGCCTCTTCTCTGCAGTTGCTGAAGGTCCAGGCTTG
CCTCAAGTTCCATGCTTGAGCAATAAAGTGAAACAATAAAACCTGGGTGTCAGACAAAAAAAAAAAAAAAAAAAA
A

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FIGURE 3440

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTGTEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKD
KFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPP NATLVFEVELFEFKGEDLTEEDGGI
IRRIQTRGEGYAKPNEGAI VEVALEGGYKDKLFDQRELRF EIGEGENLDLPYGLERAIQRMKEGHSIVYLKPSY
AFGSVGKEKFQIPPNAELKYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTIVYFKEGKYKQALLQYKKIVSWL
EYESFSNEEAQKAQALRLASHNLAMCHLKLQAFSAATESCNKALELDSNNEKGLFRERGEAHLAVNDFELARAD
FQKVLQLYPNNKAAKTQLAVCQQRIRRLAREKKLYANMFERLAEENKAKAEASSGDHPTDTEMKEEQKSNTAG
SQSQVETEA

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FIGURE 3441

GCGGAGCTGCCAGCCGCGGGCCGCTCGTTGGTGGCGGTGCCAGGGCTCGCCCACCCGGGCGGTGGAACACGGGC
CAGGACGGGGAGCGACTCCCCACAGTGCTTTCCTGGCCCTTCGGCCTTTGTGCGACGCAGGCGCGACAGGGTTCC
GGCGCCCTCCCGGGGTCCCCTGCCGACGCGGGGACCCAGCGAGGTCCCCACTCGCCGCGCGGGCGCCCCCTCCCTC
GGCCCCGGGGAGGCCGGGCGCGGGGCATGCCGGGAGCTGTAGTCCCCTCCCCCTCCGCCGCTCCCGGAGCCAG
GGCTGCGGGGTGTGGGGCGGGGAGGAGGCGCTCTGCTGTGGAGCCTGCCGCCGAGTGACCGCTCGACTACAAATA
GCCTGGGGAGCTGCGGGGAGGGCATCTTGACCTGGGCCAGGACAACCTGCCTTGGGTGCGAGCAGGTTCCAGGGA
GAATCAGAGATGGTGAATCCCAGCCTGCGTCTTATGCCTTCTCCCCATCCGCTGCTGCGTCCTCATCCTGGCTT
CCCACCGCTGAGCTCCGCGTGTGCGGCACCCACCTCAGGGGGCCTTTACCTGGTCCAGAAGTGCACTCTGTCTTG
CACCAGATTATTGGGGACCTCAAGCGTCTGCTCCAGCGGCTCTCCTGTGGCATGTGACTTCCCCTTCTCGCTCCA
GCGTCCTGCCGTTTTCTACGAGATTGTTATTCCAGGTCAAGAGAGAGGGGCACAGGTACAGAGATGCCCATGA
TTGGGGACCGAGTCTTTGTCCA

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FIGURE 3442

GTGCGACGGGGTTTCAGGGAATATTTACTGGGCCTCTCCGCTCCCTCTGCTCTTGAGAGTGCCATGAGGTCAGT
TAGCTACGTGCAGCGCGTGGCGCTGGAGTTCAGCGGGAGCCTCTTCCCGCACGCAATCTGCCTCGGAGACGTTGA
TAACGATACGTTAAATGAACTGGTGGTGGGAGACACCAGCGGGAAGGTGTCTGTGTATAAAAAATGATGACAGTCG
GCCATGGCTCACCTGTTCTGCCAGGGAATGCTGACTTGCGCTGGGGTTGGAGACGTGTGTAATAAAGGAAAGAA
CCTGTTGGTGGCAGTGAGTGCTGAAGGCTGGTTTTCATTTGTTTGACCTGACACCTGCCAAGGTGTTGGATGCTTC
TGGGCACCACGAGACACTAATCGGAGAGGAGCAGCGTCCAGTCTTCAAGCAGCACATCCCTGCCAACACCAAGGT
CATGCTGATCAGCGACATCGATGGAGATGGGTGTCGTGAGCTGGTGGTGGGCTACACAGACCGTGTGGTGGCAGC
TTTCCGCTGGGAGGAGCTAGGTGAGGGTCTGAACATCTGACAGGGCAGCTGGTGTCCCTCAAGAAATGGATGCT
GGAGGGTCAGGTGGACAGCCTCTCAGTGACTCTGGGGCCACTGGGTCTTCCTGAAGTATGGTGTCTCAGCCAGG
TTGTGCGTATGCAATTCTAATGTGTACCTGGAAAAAGGACACTGGGTCCCCTCCTGCCTCTGAAGGGCCCACGGA
TGGTAGTAGGGAGACCCAGCTGCCCGAGACGTGGTGTGACACAGACATCTGGCCGTATCCACAACAAGAATGT
CTCCACTCACCTAATTGGCAACATCAACAAGGCCACGGCACTGAGAGTAGTGGCTCTGGCCTCTTTGCCCTGTG
CACCTGGATGGGACACTGAAGCTCATGGAAGAAATGGAAGAAGCAGACAAGCTGCTGTGGTCAGTGCAGGTGGA
TCACCAGCTCTTTGCCCTGGAGAACTGGATGTACCGGCAACGGGCATGAGGAGGTAGTTGCATGCGCCTGGGA
TGGACAGACATATATCATTGATCACAACCGCACCGTCTCGCTTCCAAGTGGATGAAAATATCCGTGCCTTCTG
TGCGGGCCTGTACGCTGCAAAGAGGGCCGCAACAGCCCCTGCCTCGTATATGTCACTTTCAACCAGAAGATCTA
TGTGTACTGGGAGGTGCAGCTGGAGCGGATGGAGTCTACCAATCTGGTGAAACTGCTGGAGACCAAGCCGGAGTA
CCACAGCCTGCTGCAGGAGCTGGGCGTGGATCCTGACGACCTCCCTGTGACTCGTGCCCTGCTTCACCAACGCT
CTACCATCCAGACCAGCCACCACAGTGTGCTCCCTCAAGCCTCCAGGATCCCACCTAGCTGTACTTGCCTCATAG
CTGGTGAAGGATTCTTCTGAACCCCCACCCTACCCCTAAAGGTATCTGTGGTATTGGCAGGATAGGGAATATGC
ATTACAGAAATGCAGGATTTGACTCTGGGCATGAAAGATGGCAGCAGCCCTAGGGTGACCGTGAAGTATAGACCT
CGCAGTCTTTTCGGTGAAAGAAGAGACAAGTTGACCCTCTGCCCATTTCTTATGGACCTCAGCCATCATGCCAG
CAGGGTCATAGGACCCTGGCCTTGTTCCAAATCATCTGGGACATGACCCACTCCCCACTGTCACTGTGTTGAAAA
CAGAGACTTGTGTTGTGTGGCCCCAACACCCATAAGGAAACCAGGCTTTAGGCCAGGGGAGCAGTGGAGGTAAGG
GCTCCACCCCATCTTAAGCTCTGTCTTCCGTGGCACAATTCCAAGTTCTTGACGTTAGTAATTGTTAAAGGAATG
GCAAACTGTTTTGTTTTGAAGGATCTTTCTACAGTCTGGTCTTACCCATGTTCCCTAGCAACCCCTGAGATGATTTT
CTTCCATTTACCAAAGCAGCCGGGTGAGTGCCTTCTCAGTTCGCGTATTCTTCAGGTATTAGTCAGCTTCAGAA
GCCCTGCTCCCATTTTTCCACCCACCCATTCCCCATAAAACAGCTTATTGTCTCCAAGACAATAGACATTTAAA
ATGTGATGCGGGTTTATGATCCAGACCACAATCAGAATTATATCTTGGGTCATT

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FIGURE 3443

MRSVSYVQRVALEFSGSLFPFAICLGVDVNDTLNELVVGDTSGKVSVKNDSDSRPWLTCSQGM LTCAGVG DVCN
KGKNLLVAVSAEGWFH LFDLTPAKVLDASGH HETLIGEEQRPVFKQH IPANTKVMLISDIDGDGCRELVVGYTDR
VVRAFRWEELGEGPEHLTGQLVSLKKWMLEGQVDSL SVTLGPLGLPELMVSQPGCAYAILLCTWKKDTGSPPASE
GPTDGSRET PAARDVVLHQTSGRIHNKNVSTHLIGNIKQGHGTESSGSLFALCTLDGTLKLMEEMEEADKLLWS
VQVDHQLFALEKLDVTGNGHEEVVACAWDGQTYIIDHNRTVVR FQVDENIRAF CAGLYACKEGRNSPCLVYVTFN
QKIYVYWEVQLERMESTNLVKLLET KPEYHSLLOELGVDPDDL PVTRALLHQTLYHPDQPPQCAPSSLQDPT

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FIGURE 3444

CGGCGGCGACTGCAGTCTGGAGGGTCCACACTTGTGATTCTCAATGGAGAGTGAAAACGCAGATTTCATAATGAAA
GCTAGCCCCCGTCGGCCACTGATTCTCAAAAGACGGAGGCTGCCCTTCCTGTTCAAAATGCCCAAGTGAAACA
TCAGAGGAGGAACCTAAGAGATCCCCTGCCAACAGGAGTCTAATCAAGCAGAGGCCTCCAAGGAAGTGGCGGAG
TCCAACCTCTTGCAAGTTTCCAGCTGGGATCAAGATTATTAACCAACCCACCATGCCAACACGCAAGTAGTGGCC
ATCCCCAACAAATGCTAATATTACAGCATCATCACAGCACTGACTGCCAAGGGAAAAGAGAGTGGCAGTAGTGGG
CCCAACAAATTCATCCTCATCAGCTGTGGGGGAGCCCCAACTCAGCCTCCAGGACTCCGGCCTCAAACCCAAACC
AGCTATGATGCCAAAAGGACAGAAGTGACCCTGGAGACCTTGGGACCAAAACCTGCAGCTAGGGATGTGAATCTT
CCTAGACCACCTGGAGCCCTTTGCGAGCAGAAACGGGAGACCTGTGCAGATGGTGAGGCAGCAGGCTGCACTATC
AACAATAGCCTATCCAACATCCAGTGGCTTCGAAAGATGAGTTCTGATGGACTGGGCTCCCGCAGCATCAAGCAA
GAGATGGAGGAAAAGGAGAATTGTCACCTGGAGCAGCGACAGGTTAAGGTTGAGGAGCCTTCGAGACCATCAGCG
TCCTGGCAGAACTCTGTGTCTGAGCGGCCACCCTACTCTTACATGGCCATGATACAATTGCCCATCAACAGCACT
GAGAGGAAGCGCATGACTTTGAAAGACATCTATACGTGGATTGAGGACCACTTTCCCTACTTTAAGCACATTGCC
AAGCCAGGCTGGAAGAACTCCATCCGCCACAACCTTTCCCTGCACGACATGTTTGTCCGGGAGACGCTGCCAAT
GGCAAGGTCTCCTTCTGGACCATTACCCCAAGTGCCAACCGCTACTTGACATTGGACCAGGTGTTTAAGCCACTG
GACCCAGGGTCTCCACAATTGCCCGAGCACTTGGAAATCACAGCAGAAACGACCGAATCCAGAGCTCCGCCGGAAC
ATGACCATCAAAACCGAACTCCCCCTGGGCGCACGGCGGAAGATGAAGCCACTGCTACCACGGGTGAGCTCATAC
CTGGTACCTATCCAGTTCCCGGTGAACCACTACTGGTGTGTCAGCCCTCGGTGAAGGTGCCATTGCCCTTGCGG
GCTTCCCTCATGAGCTCAGAGCTTGCCCGCCATAGCAAGCGAGTCCGCATTGCCCCCAAGGTGCTGCTAGCTGAG
GAGGGGATAGCTCCTCTTTCTTCTGCAGGACCAGGGAAAGAGGAGAACTCCTGTTTGGAGAAGGGTTTTCTCCT
TTGCTTCCAGTTCAGACTATCAAGGAGGAAGAAATCCAGCCTGGGGAGGAAATGCCACACTTAGCGAGACCCATC
AAAGTGGAGAGCCCTCCCTTGGAAGAGTGGCCCTCCCCGGCCCCATCTTCAAAGAGGAATCATCTCACTCCTGG
GAGGATTTCGTCCCAATCTCCACCCCAAGACCCAAAGAAGTCCTACAGTGGGCTTAGGTCCCCAACCCGGTGTGTC
TCGGAAATGCTTGTGATTCAACACAGGGAGAGGAGGGAGAGGAGCCGCTTCGGAGGAAACAGCATCTACTGCCT
CCCTGTGTGGATGAGCCGGAGCTGCTCTTCTCAGAGGGGCCAGTACTTCCCGCTGGGCCGAGAGCTCCCGTTC
CCAGCAGACTCCTCTGACCCTGCCTCCCAGCTCAGCTACTCCCAGGAAGTGGGAGGACCTTTTAAGACACCCATT
AAGGAAACGCTGCCCATCTCCTCCACCCCGAGCAATCTGTCTCCCCAGAACCCCTGAATCCTGGAGGCTCACG
CCCCAGCCAAAGTAGGGGACTGGATTTACAGCCAGTACAAACCTCCAGGGTGCCCTTGACCCCTTGCTGAC
CCCCTGGGGCTGATGGATCTCAGCACCCTCCCTTGCAAAGTGCTCCCCCCTTGAATCACCGCAAAGGCTCCTC
AGTTCAGAACCCCTTAGACCTCATCTCCGTCCCCTTTGGCAACTCTTCTCCCTCAGATATAGACGTCCCCAAGCCA
GGCTCCCCGGAGCCACAGGTTTCTGGCCTTGACGCAATCGTTCTCTGACAGAAGGCCTGGTCTTGACACAATG
AATGACAGCCTCAGCAAGATCCTGCTGGACATCAGCTTTCCTGGCCTGGACGAGGACCCACTGGGCCCTGACAAC
ATCAACTGGTCCCAGTTTATTCTGAGCTACAGTAGAGCCCTGCCCTTGCCCTGTGCTCAAGCTGTCCACCATC
CCGGGCACTCCAAGGCTCAGTGCACCCCAAGCCTCTGAGTGAGGACAGCAGGCAGGGACTGTTCTGCTCCTCATA
GCTCCCTGCTGCCTGATTATGCAAAAGTAGCAGTCACACCCTAGCCACTGCTGGGACCTTGTTGTTCCCCAAGAGT
ATCTGATTCTCTGCTGTCCCTGCCAGGAGCTGAAGGTGGGAACAACAAAGGCAATGGTGAAAAGAGATTAGGA
ACCCCCAGCCTGTTTCCATTCTCTGCCCAGCAGTCTCTTACCTTCCCTGATCTTTGCAGGGTGGTCCGTGTA
TAGTATAAATTCTCAAATTATCCTCTAATTATAAATGTAAGCTTATTTCTTAGATCATTATCCAGAGACTGCC
AGAAGGTGGGTAGGATGACCTGGGGTTTCAATTGACTTCTGTTCTTGTCTTTAGTTTTGATAGAAGGGAAGACC
TGAGTGCACGGTTTCTTCCAGGCTGAGGTACCTGGATCTTGGGTTCTTCACTGCAGGGACCCAGACAAGTGGAT
CTGCTTGCCAGAGTCTTTTTTGCCCTCCCTGCCACCTCCCCGTGTTCCAAGTCAGCTTTCCTGCAAGAAGAAA
TCCTGGTTAAAAAAGTCTTTTGTATTGGGTGAGGATTGAATTTGGGGTGGGAGGATGGATGCAACTGAAGCAGA
GTGTGGGTGCCAGATGTGCGCTATTAGATGTTTCTTGATAATGTCCCAATCATACAGGGAGACTGGCATTG
ACGAGAATCAGGTGGAGGCTTGAGAAGGCCGAAAGGGCCCTGACCTGCCTGGCTTCCCTAGCTTGCCCTCAG
CTTTGCAAAGAGCCACCCTAGGCCCCAGCTGACCGCATGGGTGTGAGCCAGCTTGAGAACACTAACTACTCAATA
AAAGCGAAGGTGGACCXAAAAAAAAAAAAAAAAAAAA

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FIGURE 3445

MKASPRRPLILKRRRLPLPVQNAPSETSEEEPKRSPAQQESNQAEASKEVAESNSCKFPAGIKIINHPTMPNTQV
VAIPNNANIHSIITALTAKGKESGSSGPNKFILISCGGAPTQPPGLRPQTQTSYDAKRTEVTLETLGPKPAARDV
NLPRPPGALCEQKRETCADGEAAGCTINNSLSNIQWLRKMSSDGLGSRSIKQEMEEKENCHLEQRQVKVEEPSRP
SASWQNSVSERPYPYSYMIQFAINSTERKRMILKDIYTWIEDHFPYFKHIAKPGWKNSIRHNLSLHDMFVRETS
ANGKVSFWTIHPSANRYLTLDQVFKPLDPGSPQLPEHLESQOKRPNPELRRNMTIKTELPLGARRKMKPLPRVS
SYLVP IQFPVNQSLVLQPSVKVPLPLAASLMSELARHSKRVRIPKVLLAEEGIAPLSSAGPGKEEKLLFGEGF
SPLLVPQTIKEEEIQPGEEMPHLARP IKVESPPLEEWSPAPSFKEESSHSHWEDSSQSPTPRPKKSYSGLRSPTR
CVSEMLVIOHRRERRERSRRKQHLLPPCVDEPELLFSEGPSTSRWAAELPFPADSSDPASQLSYSQEVGGPFKT
PIKETLPISSTPSKSVLPRTPEWRLTPPAKVGGLDFSPVQTSQGASDPLPDPLGLMDLSTTPLQSAPPLESPQR
LLSSEPLDLISVPFGNSSPSDIDVPKPGSPEPQVSGLAANRSLTEGLVLDTMNDSLKILLDISFPGLEDEDPLGP
DNINWSQFIPELQ

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FIGURE 3446

CGAAGGCTGTGCGGTCTGCCAGGAGCTGCGGCCCCGTCCGGCCCCGGGCTGGCATGGGTTGGAATTGGAGCCTATC
CCCCAACCCGAAGGCTAACAGCATCATGTGGTTACTAACTGTTCTCATTACCGGTTGATGCCTCCCAGAAAAA
AACGCCGCCAGCCTTCCCAGAAAGCCCCGCTGCTGTTCCACCAACAACCACTGGAGGGCCCCAAACACAGCTGTG
CATCTACACAGCTTCCCATCACTCACACTCGACAGGTGCCAGCAAGCCCATTGACCACAGCACCATCACTTCCT
GGGTATCACCTGATTTTGATACAGCAGCAGGAAGCTTGTTCCAGCCTACCAGAAACACCAAAACCGGGCGAGAC
ACTCAAGTCGAAAACCTACCACCTCCAAGTTTCCACATCTAACTTTTGAGAGTCCGCAATCTTCCAGTTCAGAGA
CATTGGGGATCCCCCTTAATCCGAGAGTGCCCCAGTGAATCAGAAAAGGATGTTTCCAGAAGACCCTTAGTTCAG
TGCTCAGTCCCCAAAGCTGTGGGAACATGTCAGTGCAGGCACTTCAGAGCTTACCTTATGTGTTCACTCCACCTG
ATATCCAGACCCAGAGTCATCATCTGTGAAGGAAGAACTCATTCCCCAAGATCAGAAGGAAAACAGCCTTCTAA
GCTGCACTCTTCACACTGGCACTCCTAATAGCCCAGAGCCTGGACCTGTTCTGGTTAAAGACACCCCCGAGGACA
AGTATGGAATAAAGGTCACATGGAGGAGACGACAGCACCTGCTTGCTTACCTCAGGGAGAGAGGGAAGCTGAGCA
GAAGCCAATTCTTGTGAAAAGCTGACTGCCATCAGTAATCTCAATAGAAAAGAGATATGTTTTCTGGAGTCATA
AAGGAATTCAATTCCTAGGGTTTTGTTTTTGTGTTTTGAGATGTAATATTGCTCTGTTGCCAGGCTGGAGTGCA
GTGGTATGATCTCACCTTACTGCAACCACCACTTCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCCAGTAG
CTGGGATTACAGGCACCAGCCACCATGCCTGGCTAATTTTTTTGTATTTTTAGTAGAGATGTGGTTTCTCCATGT
TGCCAGGCTGGTCTCAAATCCTGACCTCAAGTCATCTGCTGGCCTTGACCTCACAAAGTGCTGGCCAGCCGA
GATTTGTTTTCTAAGATACTTTGTGTCATGAACAGTTTCAAGTTTGTGTCATGAACATTCACTTCATATTTTTCT
TGTATTAAGTGTGTTAAATTTTTTAAATATCTTGTAGTAACTCTTTAAATGTATGTAAGTAAATGGCTGCAGAAA
GTTTTTTTAGAGAATCCTGCTTCCATCAGTAATACAGCAATATTACCCCATCCACTAAAAAAAAAAAAAAAAAAAA
A

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FIGURE 3447

MPPRKKRRQPSQKAPLLFHQQFLEGPKHSCASTQLPITHTRQVPSKPIDHSTITSWVSPDFDTAAGSLFPAYQKH
QNRARHSSRKPTTSKFPHLTFESPQSSSSETLGIPLIRECPSESEKDVSRRPLVPVLSPOSCGNMSVQALQSLPY
VFIPDQITPESSSSVKEELIPQDQKENSLLSCTLHTGTPNSPEPGPVLVKDTPEDKYGIKVTWRRRQHLLAYLRE
RGKLSRSQFLVKS

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[illegible]

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FIGURE 3449

MAAAAQSRVVRVLSMSRSAITAIATSVCHGPPCRQLHHALMPHGKGRSSVSGIVATVFGATGFLGRYVNVHLGR
MGSQVIIPYRCDKYDIMHLRPMGDLGQLLFLEWDARDKDSIRRVVQHSNVVINLIGRDWETKNFDFEDVFVKIPQ
AIAQLSKEAGVEKFIHVSHLNANIKSSSRYLNRNKAVGEKVVRDAFPEAIIVKPSDIFGREDRFLNSFASMHRFGP
IPLGSLGWKTVKQPVYVVDVSKGIVNAVKDPDANGKSFAFVGPSRYLLFHLVKYIFAVAHRLFLPFPLPLFAYRW
VARVFEISPFEPWITRDKVERMHITDMKLPPLPGLEDLGIQATPLELKAIEVLRHRRTYRWLSAEIEDVKPAKTV
NI

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FIGURE 3450

CTCCCGCCTTCTCTCCGCAGAGCTCTTCTCTGAGCCTGTTGGGGGGAGGGAGGGGGGGCGTGGAGGAAGTGGGGTT
CGCGGGAGCACGAGCTGCAGCACCCTTCCGGAAAGTTCAGGAGCCCTGGAAAGGAGAAGGAATAAGACGGCAGG
AGGAAGAGAGAGAGAGGGGTAGAATGGAAGAATCTCACTTCAATTCTAACCCTACTTCTGGCCTTCTATCCCCAC
AGTCTCAGGTCAGATCGAGAACAATGTTTCATCAACAAGATGAAGGATCAGCTGTTGCCAGAGAAGGGCTGTGG
TCTGGCCCCACCTCACTACCCACCTTGCTGACAGTGCCTGCCTCAGTGTCCCTGCCCTCAGGCATCAGTATGGA
CACAGAGTCCAAGTCAGACCAGCTGACCCACACAGCCAAGCGTCCGTTACCCAGAATATCACGGTGGTCCCTGT
GCCGTCTACAGGACTGATGACTGCTGGAGTCTCCTGTTCTCAGAGGTGGAGAAGAGAAGGGAGTCAATCAAGGGG
TCCGGGTTTGGTAATCACGTCCCCCTCAGGCTCTCTTGTGACCACAGCATCATCAGCTCAGACCTTCCCCATTTC
GGCTCCCATGATTGTCTCAGCTCTTCCCCCTGGCTCACAAGCCCTGCAGGTTGTCCCTGACCTCTCCAAGAAGGT
AGCATCGACCCTAACCGAGGAAGGAGGCGGAGGTGGTGGTGGAGGTGGCAGTGTGGCTCCTAAGCCACCCGGGG
CCGGAAGAAGAAGCGGATGCTGGAATCAGGGCTGCCCGAGATGAATGACCCTTATGTCTCTCCCTGAGGATGA
TGATGACCATCAGAAAGACGGCAAGACCTACAGGTGCCGGATGTGCTCACTGACATTCTACTCCAAGTCGGAGAT
GCAGATCCACTCCAAGTCACACACCGAGACCAAGCCCCACAAGTGCCACATTGCTCCAAGACCTTCGCCAACAG
CTCCTACCTGGCCCCAGCACATCCGTATACACTCAGGGGCTAAGCCCTACAGTTGTAACCTTCTGTGAGAAATCCTT
CCGCCAGCTCTCCACCTTCAGCAGCACACCCGGATCCACTCCAAGATGCACACGGAGACCATCAAGCCCCACAA
GTGCCCCGACTGCTCCAAGACCTTCGCCAACACCTCCTACCTGGCCCAGCACCTCCGTATCCACTCGGGGGCCAA
GCCCTACAAGTGTTCCTACTGCCAGAAGGCCTTCCGCCAGCTCTCCACCTCCAGCAGCACACACGAATCCACAC
TGGTGATAGACCATACAAATGTGCACACCCAGGCTGTGAGAAAGCCTTCACACAACCTCTCCAATCTGCAGTCCCA
CAGACGGCAACACAACAAAGATAAACCCTTCAAGTGCCACAACCTGTCATCGGGCGTACACGGATGCAGCCTCACT
AGAGGTGCACCTGTCTACGCACACAGTGAAGCATGCCAAGGTGTACACCTGCACTATCTGCAGTCGGGCATACAC
ATCAGAAACATACCTTATGAAACATATGCGCAAACACAACCCGCCTGATCTTCAGCAACAGGTGCAGGCAGCAGC
AGCAGCGGCAGCAGTGGCCCCAGGCCAGGCTCAAGCTCAAGCCCAGGCTCAGGCTCAGGCTCAAGCCCAGGCCCA
GGCCCAGGCCTCCCAGGCATCACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCCACCACC
ACACTTCCAGTCTCCTGGGGCAGCCCCCAGGGTGGGGGTGGTGGGGACAGCAATCCCAACCCCTCCACCCAGTG
TTCTTTTGACCTGACCCCGTATAAGACGGCGGAGCATCATAAGGACATCTGCCTCACTGTCACCACCAGCACCAT
CCAGGTGGAGCACCTGGCCAGCTCTTAGAGATCCGTGCTGCCACCCACTGGGAAGAGGAAGAAGTAGTCTGGTG
TCTTCTTTCTCCAACCTTTGGTGGGAAAAGTCCTTTTCTTCTTGACAGGCCTTGGCTCCATCTCCTTGGGGCTC
TGTCACGGCTTTCTTTCACAGGATACCATCCTTTTCTGAACTCTTCTTCAAAGGAACATCAGCCCTCCTGATT
GCAAAGGAATACTGAGCTGATGGTGTCTCAGCAGCCTCCCCTCCCAAGCAAAGCTTCTAAACTGGGGGTCTCGG
TGCTCAAGGGAAGGATTTGCTATGACCTCATAGAAC

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FIGURE 3451

CTTCAAGTGCCACAACCTGTCATCGGGCGTACACGGATGCAGCCTCACTAGAGGTGCACCTGTCTACGCACACAGT
GAAGCATGCCAAGGTGTACACCTGCACTATCTGCAGTCGGGCATACACATCACAACAGGTGCAGGCAGCAGCAGC
AGCGGCAGCAGTGGCCCAGGCCAGGCTCAAGCTCAAGCCCAGGCTCAGGCTCAGGCTCAAGCCCAGGCCAGGC
CCAGGCCTCCCAGGCATCACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCCACCACCACA
CTTCCAGTCTCCTGGGGCAGCCCCCAGGGTGGGGGTGGTGGGGACAGCAATCCCAACCCTCCACCCCAGTGTTT
CTTTGACCTGACCCCGTATAAGACGGCGGAGCATCATAAGGACATCTGCCTCACTGTCACCACCAGCACCATCCA
GGTGGAGCACCTGGCCAGCTCTTAGAGATCCGTGCTGCCACCCACTG

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FIGURE 3452

GGGCCGGAGTTCCTGCAGAGGGAGCGTCAAGGCCCTGTGCTGCTGTCCCTGGGGGCCAGAGGGGTTGCCAGCAT
GCCCCACTGGCAGGAGAGAGGGAAGTACCCACTTGCTCCTACCAGCTTCTGAAGGCTCCAAAGTCCGGAGTGCAG
AAAGCCAGGACCAAGAGACAGGCAGCTCACCAGGGTGGACAAATCGCCAGAGATGTGGTGCATTGTCCTGTTTC
ACTTTTGGCATGGGTTTATGCTGAGCCTACCATGTATGGGGAGATCCTGTCCCCTAACTATCCTCAGGCATATCC
CAGTGAGGTAGAGAAATCTTGGGACATAGAAGTTCCTGAAGGGTATGGGATTACCTCTACTTCACCCATCTGGA
CATTGAGCTGTCAGAGAACTGTGCGTATGACTCAGTGCAGATAATCTCAGGAGACACTGAAGAAGGGAGGCTCTG
TGGACAGAGGAGCAGTAACAATCCCCACTCTCCAATTGTGGAAGAGTTCCAAGTCCCATACAACAACTCCAGGT
GATCTTTAAGTCAGACTTTTCCAATGAAGAGCGTTTTACGGGGTTTGTGTCATACTATGTTGCCACAGACATAAA
TGAATGCACAGATTTTGTAGATGTCCCTTGTAGCCACTTCTGCAACAATTTTCATTGGTGGTTACTTCTGCTCCTG
CCCCCGGAATATTTCTCCATGATGACATGAAGAATTGCGGAGTTAATTGCAGTGGGGATGTATTCACTGCACT
GATTGGGGAGATTGCAAGTCCCAATTATCCCAAACCATATCCAGAGAACTCAAGGTGTGAATACCAGATCCGGTT
GGAGAAAGGGTTCCAAGTGGTGGTGACCTTGCGGAGAGAAGATTTTGATGTGGAAGCAGCTGACTCAGCGGAAA
CTGCCTTGACAGTTTAGTTTTTGTGTCAGGAGATCGGCAATTTGGTCTTACTGTGGTTCATGGATTCCCTGGGCC
TCTAAATATTGAAACCAAGAGTAATGCTCTTGATATCATCTTCCAACTGATCTAACAGGGCAAAAAAGGGCTG
GAACTTCGCTATCATGGAGATCCAATGCCCTGCCCTAAGGAAGACACTCCCAATTCTGTTTGGGAGCCTGCGAA
GGCAAAATATGTCTTTAGAGATGTGGTGCAGATAACCTGTCTGGATGGGTTTGAAGTTGTGGAGGGACGTGTTGG
TGCAACATCTTTCTATTGCACTTGTCAAAGCAATGGAAAGTGGAGTAATTCCAACTGAAATGTCAACCTGTGGA
CTGTGGCATTCTGAATCCATTGAGAATGGTAAAGTTGAAGACCCAGAGAGCACTTTGTTTGGTTCTGTATCCG
CTACACTTGTGAGGAGCCATATTACTACATGGAAAATGGAGGAGGTGGGGAGTATCACTGTGCTGGTAACGGGAG
CTGGGTGAATGAGGTGCTGGGCCCGGAGCTGCCGAAATGTGTTCCAGTCTGTGGAGTCCCCAGAGAACCCTTTGA
AGAAAAACAGAGGATAATTGGAGGATCCGATGCAGATATTA AAAACTTCCCCTGGCAAGTCTTCTTTGACAACCC
ATGGGCTGGTGGAGCGCTCATTAAATGAGTACTGGGTGCTGACGGCTGCTCATGTTGTGGAGGGAAACAGGGAGCC
AACAATGTATGTTGGGTCCACCTCAGTGCAGACCTCACGGCTGGCAAAATCCAAGATGCTCACTCCTGAGCATGT
GTTTATTATCCGGGATGGAAGCTGCTGGAAGTCCCAGAAGGACGAACCAATTTTGATAATGACATTGCACTGGT
GCGGCTGAAAGACCCAGTGAAAATGGGACCCACCGTCTCTCCCATCTGCCTACCAGGCACCTCTTCCGACTACAA
CCTCATGGATGGGGACCTGGGACTGATCTCAGGCTGGGGCCGAACAGAGAAGAGAGATCGTGCTGTTGCGCTCAA
GGCGGAAGGTTACCTGTAGCTCCTTTAAGAAAATGCAAAGAAGTGAAGTGGAGAAACCCACAGCAGATGCAGA
GGCCTATGTTTTCACTCCTAACATGATCTGTGCTGGAGGAGAGAAGGGCATGGATAGCTGTAAAGGGGACAGTGG
TGGGGCCTTTGCTGTACAGGATCCCAATGACAAGACCAATTTCTACGCAGCTGGCCTGGTGTCTGGGGGCCCCA
GTGTGGGACCTATGGGCTCTACACACGGGTAAAGAACTATGTTGACTGGATAATGAAGACTATGCAGGAAAATAG
CACCCCCCGTGAGGACTTAATCCAGATACATCCCACAGCCTCTCCAAGGGTGGTGACCAATGCATTACCTTCTGT
TCCTTATGATAATTCTCATTATTTATCATGACTGAAAGAAGACACGAGCGAATGATTTAAATAGAACTTGATTGT
TGAGACGCCTTGCTAGAGGTAGAGTTTGATCATAGAATTGTGCTGGTCATACATTTGTGGTCTGACTCCTTGGGG
TCCTTTCCCGGAGTACCTATTGTAGATAACACTATGGGTGGGGCACTCCTTTCTTGCACTATTCCACAGGGATA
CCTTAATTCTTTGTTTCTTTACCTGTTCAAATTCATTTACTTGATCATTCTCAGTATCCAATGTCTATGT
ACAATAAAGGATGTTTATAAGC

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FIGURE 3453

MWCIVLFSLLAWVYAEPTMYGEILSPNYPQAYPSEVEKSWDIEVPEGYGIHLYFTHLDIELSENCAYSVQIIISG
DTEEGRLCGQRSSNNPHSPIVEEFQVPYNKLQVIFKSDFSNEERFTGFAAYYVATDINECTDFVDVPCSHFCNNF
IGGYFCSCPPEYFLHDDMKNCGVNCSGDVFTALIGEIASPNYPKYPENSRCYQIRLEKGFQVVVTLRREDFDV
EAADSAGNCLDSL VFVAGDRQFGPYCGHGFPGLNIETKSNALDIIFQTDLTGQKKGWKLRYHGDPMPCPKEDTP
NSVWEPAAKAKYVFRDVVQITCLDGFVVEGRVGATSFYSTCQSNKWSNSKLCQPVDGIPESIENGKVEDPES
TLFGSVIRYTCEEPYYMENGSGGEYHCAGNSWVNEVLGPELPKCVPCGVPREPFEKQRIIGGSDADIKNFP
WQVFFDNPWAGGALINEYWVLTAHVVEGNREPTMYVGSTSVQTSRLAKSKMLTPEHVFIHPGWKLLEVEGRTN
FDNDIALVRLKDPVKMGPTVSPICLPGTSSDYNLMDGDLGLISGWGRTEKRDRAVRLKAARLPVAPLRKCCEVKV
EKPTADAEAYVFTPNMICAGGEKGMDSCCKGDSGGAFAVQDPNDKTKFYAAGLVSWGPQCGTYGLYTRVKNYVDWI
MKTMQENSTPRED

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FIGURE 3454

CTCCTGAGCATGTGTTTATTCATCCGGGATGGAAGCTGCTGGAAGTCCCAGAAGGACGAACCAATTTTGATAATG
ACATTGCACTGGTGCGGCTGAAAGACCCAGTGAAAATGGGACCCACCGTCTCTCCCATCTGCCTACCAGGCACCT
CTTCCGACTACAACCTCATGGATGGGGACCTGGGACTGATCTCAGGCTGGGGCCGAACAGAGAAGAGAGATCGTG
CTGTTGCGCTCAAGGCGGCAAGGTTACCTGTAGCTCCTTTAAGTTTCACTCCTAACATGATCTGTGCTGGAGGAG
AGAAGGGCATGGATAGCTGTAAAGGGGACAGTGGTGGGGCCTTTGCTGTACAGGATCCCAATGACAAGACCAAAT
TCTACGCAGCTGGCCTGGTGTCTTGGGGGCCCCAGTGTGGGACCTATGGGCTCTACACACGGGTAAAGAACTATG
TTGACTGGATAATGAAGACTATGCAGGAAAATAGCACCCCCCGTGAGGACTAATCCAGATACATCCCACCAGCCT
CTCCAAGGGTGGTGACCAATGCATTACCTTCTGTTTCCTTATGATATTCTCATTATTTTCATCATGACTGAAAGAAG
ACACGAGCGAATGATTTAAATAGAACTTGATTGTTGAGACGCCTTG

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FIGURE 3455

GCAGTACCTAAGCCGGAGCGGGGTAGAGGCGGGCCGGCACCCCCCTTCTGACCTCCAGTGCCGCCGGCCTCAAGAT
CAGACATGGCCCAGAACTTGAAGGACTTGGCGGGACGGCTGCCCGCCGGGCCCCGGGGCATGGGCACGGCCCTGA
AGCTGTTGCTGGGGGCCGGCGCCGTGGCCTACGGTGTGCGCGAATCTGTGTTACCGTGGAAGGCGGGCACAGAG
CCATCTTCTTCAATCGGATCGGTGGAGTGCAGCAGGACACTATCCTGGCCGAGGGCCTTCACTTCAGGATCCCTT
GGTTCCAGTACCCATTATCTATGACATTCGGGCCAGACCTCGAAAAATCTCCTCCCCTACAGGCTCCAAAGACC
TACAGATGGTGAATATCTCCCTGCGAGTGTGTCTCGACCCAATGCTCAGGAGCTTCCTAGCATGTACCAGCGCC
TAGGGCTGGACTACGAGGAACGAGTGTGCCGTCCATTGTCAACGAGGTGCTCAAGAGTGTGGTGGCCAAGTTCA
ATGCCTCACAGCTGATCACCCAGCGGGCCCAGGTATCCCTGTTGATCCGCCGGGAGCTGACAGAGAGGGCCAAGG
ACTTCAGCCTCATCCTGGATGATGTGGCCATCACAGAGCTGAGCTTTAGCCGAGAGTACACAGCTGCTGTAGAAG
CCAAACAAGTGGCCCAGCAGGAGGCCAGCGGGCCCAATTCTTGGTAGAAAAAGCAAAGCAGGAACAGCGGCAGA
AAATTGTGCAGGCCGAGGGTGAGGCCGAGGCTGCCAAGATGCTTGGAGAAGCACTGAGCAAGAACCCTGGCTACA
TCAAACTTCGCAAGATTCGAGCAGCCAGAATATCTCCAAGACGATCGCCACATCACAGAATCGTATCTATCTCA
CAGCTGACAACCTTGTGCTGAACCTACAGGATGAAAGTTTCACCAGGGGAAGTGACAGCCTCATCAAGGGTAAGA
AATGAGGCCTAGTCACCAAGAACTCCACCCCAGAGGAAGTGGATCTGCTTCTCCAGTTTTTGGAGAGCCAGCCAG
GGGTCCAGCACAGCCCTACCCGCCCCAGTATCATGCGATGGTCCCCCACACCGTTCCCTGAACCCCTCTTGGA
TTAAGGAAGACTGAAGACTAGCCCCCTTTCTGGGGAATTACTTTCTCCTCCTCCCTGTGTTAACTGGGGCTGTTGGG
GACAGTGCCTGATTTCTCAGTGATTTCTACAGTGTTGTTCCCTCCCTCAAGGCTGGGAGGAGATAAACACCAAC
CCAGGAATTCTCAATAAAATTTTATTACTTAACCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3456

MAQNLKDLAGRLPAGPRGMGTALKLLLGAGAVAYGVRESVFTVEGGHRAIFFNRIGGVQQDTILAEGLHFRIPIWF
QYPIIYDIRARPRKISSPTGSKDLQMVNISLRVLSRPNAQELPSMYQRLGLDYEERVLPSIVNEVLKSVVAKFNA
SQLITQRAQVSLIRRELTERAKDFSLILDDVAITELSFSSREYTAAVEAKQVAQQEAQRAQFLVEKAKQEQRQKI
VQAEGEAEAAKMLGEALSKNPGYIKLRKIRAAQNISKTIATSQNRIYLTADNLVLNLQDESFTRGSDSLIKGKK

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FIGURE 3457A

ACGCCATACTGGACGCCAAGTGGGAGGAACTTCAAGGCTGTCCCCTGCGGGCCTCCCGCTCTGCTTCTGCGAAGG
TTTCATTGAAAACAGATCCTGCAAAAGTTCCAGGTGCCACACTGGAACTTGGAGATCCTGCTTCCCAGACCAC
AGCTGTGGGGAACCTGGGGTGGAGCAGAGAAGTTTCTGTATTTCAGCTGCCAGGCAGAGGAGAATGGGGTCTCCA
CAGCCTGAAGAAATGAAGACACGACAGAATAAAGACTCGATGTCAATGAGGAGTGGACGGAAGAAAGAGGCCCTG
GGCCCCGGAAGAAGTCTGAGATCGAGGGGCCGGGCCTCCCCTGGAGGGGTCTCAGCACGTCCAGCAGTATGGCAAAG
CTGAGAAGTCCAGGCAGACAGCCAAGAAGGCCCGAGTAGAGGAAGCCTCCACCCCAAAGGTCAACAAGCAGGGTC
GGAGTGAGGAGATCTCAGAGAGTGAAAGTGAGGAGACCAATGCACCAAAAAAGACCAAACTGAGCAGGAACCTCC
CTCGGCCACAGTCTCCCTCCGATCTGGATAGCTTGGACGGGCGGAGCCTTAATGATGATGGCAGCAGCGACCCTA
GGGATATCGACCAGGACAACCGAAGCACGTCCCCAGTATCTACAGCCCTGGAAGTGTGGAGAATGACTCTGACT
CATCTTCTGGCCTGTCCCAGGGCCCAGCCCCCCCCCTACCACCCACCTCCACTCTTTCTCTCTTCCCCTCAACCGC
CAGACAGACCCCCCTCGACAGCCAGAGGCTAGCTTTGAACCCCATCCTTCTGTGACACCCACTGGATATCATGCTC
CCATGGAGCCCCCACCATCTCGAATGTTCCAGGCTCCTCCTGGGGCCCCCTCCCCCTCACCCACAGCTCTATCCTG
GGGGCACTGGTGGAGTTTTGTCTGGACCCCCAATGGGTCCCAAGGGGGGAGGGGCTGCCTCATCAGTGGGGGGCC
CTAATGGGGGTAAAGCAGCACCCCCCACCCTACTCCCATTTCAGTATCAAGCTCTGGGGCTAGTGGTGCTCCCC
CAACAAAGCCGCTTACCCTCCAGTGGGTGGTGGGAACCTACCTTCTGCTCCACCACCAGCCAACCTCCCCCATG
TGACACCGAACCTGCCTCCCCACCTGCCCTGAGACCCCTCAACAATGCATCAGCCTCTCCCCCTGGCCTGGGGG
CCCAACCACTACCTGGTCACTCTGCCCTCTCCCCACGCCATGGGACAGGGTATGGGTGGACTTCTCTCTGGCCAG
AGAAGGGGCCCAACTCTGGCTCCTTCACCCCACTCTCTGCCCTCCTGCTTCTCTCTGCTCCAGCGCCCCCATGA
GGTTTCTTATTTCATCCTCTAGTAGTAGCTCTGCAGCAGCCTCCTCTTCCAGTTCTTCTCTCTCTCTGCTTCCA
CCCCCTTCCCAGCTTCCCAGGCATTGCCAGCTACCCCCACTCTTTCCCTCCCCCAACAAGCCTCTCTGCTCCA
ATCAGCCCCCAAGTATACTCAGCCTTCTCTCCCATCCCAGGCTGTGTGGAGCCAGGGTCCCCCACCACCTCCTC
CCTATGGCCGCTCTTAGCCAACAGCAATGCCATCCAGGCCCTTCCCTCCCTCTACTGGGGCCAGTCCACCG
CCCACCCACAGTCTCAACACATCACCATCACCACCAGCAACAGCAACAGCAGCAGCAGCAGCAGCAGCAGCAGC
AGCAGCAGCAGCAGCAGCATACGGAAGTCTGGGCCCTCCTCCTGGAGCATTTCACCACCCACTGGAGGGCG
GTAGCTCCCACCACGCACACCTTACGCCATGTCTCCCTCCCTGGGGTCTCTGAGGCCCTACCCACAGGGCCAG
CACACCTGCCCCACCTCACAGCCAGGTGTCTACAGCCAAGCAGGCCCAATGGCCCTCCAGTCTCTTCTCTT
CCAATCTTCTCTTCCACTTCTCAAGGGTCTTACCATGTTACACCCCTCCCCCTTCCCAGGGCCCTCAAGGGG
CGCCCTACCCTTTCCCACCGGTGCCTACGGTACACCTCTTCGGCTACCCTTTCCACGGTCAATTGCCACCGTGG
CTTCTCTGCCAGCAGGCTACAAAACGGCCTCCCCACCTGGGCCCCACCGTACGGAAAGAGAGCCCCGTCCCCGG
GGGCTTACAAGACAGCCACCCACCCGGATACAAACCGGGTGCCTCCCTCCTTCCGAACGGGGACCCACCGG
GCTATCGAGGAACCTCGCCACCTGCAGGCCAGGGACCTTCAAGCCGGGCTCGCCACCGTGGGACCTGGGCCCC
TGCCACCTGCGGGGCCCTCAGGCCTGCCATCGCTGCCACCACCACCTGCGGGCCCTGCCTCAGGGCCGCCCTGA
GCGCCACGCAGATCAACAGGAGCCGGCTGAGGAGTATGAGACCCCGAGAGCCCGGTGCCCCAGCCCGCAGCC
CCTCGCCCCCTCCCAAGGTGGTAGATGTACCCAGCCATGCCAGTCAGTCTGCCAGGTTCAACAAACACCTGGATC
GCGGCTTCAACTCGTGCGCGCAGCGACCTGTACTTCGTGCCACTGGAGGGCTCCAAGCTGGCCAAGAAGCGGG
CCGACCTGGTGGAGAAGGTGCGGCGGAGGCCGAGCAGCGCGCGCGGAAGAAAAGGAGCGGAGCGGAGCGGG
AACGCGAGAAAGAGCGGAGCGGAGAGGAGCGGAGCTTGAACGCAGCGTGAAGTTGGCTCAGGAGGGCCGTG
CTCCGGTGGAAATGCCATCTCTGGGCCAGTGCCCCATCGCCCTCCATTGAAACGGGCAGTGCGGTGGCTACAG
TGCCCCCTACCTGGGTCTGACACTCCAGCCTTGGCGACTCTCAGTGAATATGCCGGCCTCATGTCTATGTCTC
CTGGCAATCGCAACCATCCATTCTACGTGCCCTGGGGGAGTGGACCCGGGGCTCCTGGGTACAAATGTCCCGG
CCCTGTACAGCAGTGATCCAGCTGCCCGGAGAGGGAACGGGACCCGTGAACGAGACCTCCGTGACCGCTTCA
AGCCTGGCTTTGAGGTGAAGCCTAGTGAGCTGGAACCCCTACATGGGGTCCCTGGGCCGGCTGGATCCCTTTC
CCCGACATGGGGGCTGGCTCTGCAGCCTGGCCACCTTGCCCTGCACCCCTTCCCCCTTTCATCCGAGCCTGGGGC
CCCTGGAGCGAGAACGTCTAGCGCTGGCAGCTGGGCCAGCCCTGCGGCCCTGACATGTCTATGCTGAGCGGCTGG
CAGCTGAGAGGCAGCACGCAGAAAGGGTGGCGGCCCTGGGCAATGACCCACTGGCCCGGCTGCAGATGCTCAATG
TGACTCCCCATCACCACCAGCACTCCACATCCACTCGCACCTGCACCTGCACCAGCAAGATGCTATCCATGCAG
CCTCTGCCCTCGGTGCACCCCTCTCATTTGACCCCTGGCCTCAGGGTCTCACCTTACCCGGATCCCTACCCAGCTG
GAACTCTCCCTAACCCCTGCTTCTCACCCTCTGCACGAGAACGAAGTTCTTCGTACCCAGCTCTTTGCTGCC

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FIGURE 3457B

CTTACCGGGACCTGCCGGCCTCCCTTTCTGCCCCGATGTCAGCAGCTCATCAGCTGCAGGCCATGCACGCACAGT
CAGCTGAGCTGCAGCGCTTGGCGCTGGAACAGCAGCAGTGGCTGCATGCCCATCACCCGCTGCACAGTGTGCCGC
TGCCTGCCCAGGAGGACTACTACAGTCACCTGAAGAAGGAAAGCGACAAGCCACTGTAGAACCTGCGATCAAGAG
AGCACCATGGCTCCTACATTGGACCTTGGAGCACCCCCACCCTCCCCCACCCTGCCCCTTGGCCTGCCACCCAGA
GCCAAGAGGGTGCTGCTCAGTTGCAGGGCCTCCGACAGTGGACAGAGAGTGGGGGAGGGAGGGACAGACAGAAGG
CCAAGGCCCCGATGTGGTGTGCAGAGGTGGGGAGGTGGCGAGGATGGGGACAGAAAGCGCACAGAATCTTGGACCA
GGTCTCTCTTCTTGTCCCCCTGCTTTTCTCCTCCCCCATGCCCAACCCCTGTGGCCGCCGCCCTCCCCTGCC
CCGTGGTGTGATTATTTATCTGTTAGATGTGGCTGTTTTGCGTAGCATCGTGTGCCACCCCTGCCCCCTCCCCG
ATCCCTGTGTGCGCGCCCCCTCTGCAATGTATGCCCTTGCCCTTCCCCACACTAATAATTTATATATATAAAT
ATCTATATGACGCTCTTAAAAAACATCCCAACCAAAACCAACCAAAACAAAACATCCTCACAACTCCCCAGGA

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FIGURE 3458

ACCCGCGCTCGTACGTGCGCCTCCGCCGGCAGCTCCTGACTCATCGGGGGCTCCGGGTACATGCGCCCGCGCGG
CCCTATAGGCGCCTCCTCCGCCCGCCGCGGGAGCCGAGCCGCGCCGCCACTGCCACTCCCCTCTCTCAGC
GCCGCCGTGCCACCGCCACCGCCACCGCCACTACCACCGTCTGAGTCTGCAGTCCCGAGATCCCAGCCATCATG

TCCATAGAGAAGATCTGGGCCCCGGGAGATCCTGGACTCCCGCGGGAACCCACAGTGGAGGTGGATCTCTATACT
GCCAAAGGTCTTTTCCGGGCTGCAGTGCCAGTGGAGCCTCTACGGGCATCTATGAGGCCCTGGAGCTGAGGGAT
GGAGACAAACAGCGTTACTTAGGCAAAGGTGTCTGAAGGCAGTGGACCACATCAACTCCACCATCGCGCCAGCC
CTCATCAGCTCAGGTCCTCTGTGGTGGAGCAAGAGAACTGGACAACCTGATGCTGGAGTTGGATGGGACTGAG
AACAAATCCAAGTTTGGGGCCAATGCCATCCTGGGTGTGTCTCTGGCCGTGTGTAAGGCAGGGGCAGCTGAGCGG
GAACTGCCCTGTATCGCCACATTGCTCAGCTGGCCGGGAACCTCAGACCTCATCCTGCCTGTGCCGGCCTTCAAC
GTGATCAATGGTGGCTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCAGTGGGAGCTGAG
AGCTTTCGGGATGCCATGCGACTAGGTGCAGAGGTCTACCATACTCAAGGGAGTCATCAAGGACAAATACGGC
AAGGATGCCACCAATGTGGGGGATGAAGGTGGCTTTGCCCCCAATATCCTGGAGAACAGTGAAGCCTTGGAGCTG
GTGAAGGAAGCCATCGACAAGGCTGGCTACACGGAAAAGATCGTTATTGGCATGGATGTTGCTGCCTCAGAGTTT
TATCGTGATGGCAAATATGACTTGGACTTCAAGTCTCCCACTGATCCTTCCCGATACATCACTGGGGACCAGCTG
GGGGCACTCTACCAGGACTTTGTGAGGGACTATCCTGTGGTCTCCATTGAGGACCCATTTGACCAGGATGATTGG
GCTGCCCTGGTCCAGTTTACAGCCAATGTAGGGATCCAGATTGTGGGTGATGACCTGACAGTGACCAACCCAAAA
CGTATTGAGCGGGCAGTGGAAGAAAAGGCCTGCAACTGTCTGCTGCTCAAGGTCAACCAGATCGGCTCGGTCACT
GAAGCCATCCAAGCGTGCAAGCTGGCCCCAGGAGAATGGCTGGGGGGTTCATGGTGAGTCATCGCTCAGGAGAGACT
GAGGACACATTCATTGCTGACCTGGTGGTGGGGCTGTGCACAGGCCAGATCAAGACTGGTGCCCCGTGCCGTTCT
GAACGCTCTGGCTAAATACAACCAGCTCATGAGAATTGAGGAAGAGCTGGGGGATGAAGCTCGCTTTGCCGGACAT
AACTTCCGTAATCCCAGTGTGCTGTGATTTCCTCTGCTTGCCTGGAGACGTGGAACCTCTGTCTCATCCTCCTGGA
ACCTTGCTGTCTGATCTGTGATAGTTACCCCCCTGAGATCCCCTGAGCCCCAGGGTGCCAGAACTTCCCTGAT
TGACCTGCTCCGCTGCTCCTTGGCTTACCTGACCTCTTGTGTCTCTGCTCGCCCTCCTTTCTGTGCCCTACTCA
TTGGGGTTCCGCACTTTCACCTTCTTCTTTCTCTTCCCTCAGAACTAGAAATGTGAATGAGGATT
ATTATAAAAGGGGGTCCGTGGAAGAATGATCAGCATCTGTGATGGGAGCGTCAGGGTTGGTGTGCTGAGGTGTTA
GAGAGGGACCATGTGTCACTTGTGCTTTGTCTTGTCCCACGTGTCTTCCACTTTGCATATGAGCCGTGAACGTG
GCATAGTGCTGGGATGGAGGGGAGTGTGGGCATGTGATCACGCCTGGCTAATAAGGCTTTAGTGTATTTATTTA
TTTATTTATTTATTTGTTTTTCAATCATCCCATTAATCATTTCCCCATAACTCAATGGCCTAAACTGGCCTGA
CTTGGGGGAACGATGTGTCTGTATTTCATGTGGCTGTAGATCCCAAGATGACTGGGGTGGGAGGTCTTGCTAGAA
TGGGAAGGGTCATAGAAAGGGCCTTGACATCAGTTCCTTTGTGTGTACTCACTGAAGCCTGCGTTGGTCCAGAGC
GGAGGCTGTGTGCCCTGGGGGAGTTTTCTCTATACATCTCTCCCAACCCTAGGTTCCCTGTTCTTCTCCAGCT
GCACCAGAGCAACCTCTCACTCCCCATGCCACGTTCCACAGTTGCCACCACCTCTGTGGCATTGAAATGAGCACC
TCCATTAAAGTCTGAATCAGTGC

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FIGURE 3459

MSIEKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALRLDGDQRYLGKGVKAVDHINSTIAP
ALISSGLSVVEQEKLDNLMLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGNSDLILPVPF
NVIINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALE
LVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDD
WAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEREACNCLLLKVNQIGSVTEAIQACKLAQENGWGMVSHRSGE
TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEELGDEARFAGHNFRNP SVL

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FIGURE 3460

GGCACGAGGGGAGAACTAGTCTCAGTTTTTTTTTTTTTTTTTTAGGTGAGAAAGCCAGCTGACTTTATTGCTCTG
GGGGCAGGGGGCTCAGGAGCTCTTGGTGGGGCGGGTCCGCTTCCTCTTCACCATCACAGGCTTCTGGCTGCGCAG
GATGGCGCTGGCCCTGCGGATGGCTGCCATGCGCAGGTGCGGGCGGTACTTGTTCTTGCGGATCATGTGCTGAT
GCTGCTGAGCGTGGCGCGAGCATTCTTGTTGATGGTGGTCCGCACATAGGAGGTGGCAGGCTTCCGCTGGCCGGA
TCTCCGCTTAATGACCACCACGACACCTTTGCCGTGCGCTGCCGGCTCCACGCCCACAGTCTTGCGGTGAATCAG
TCCGTTGTAGCGGAAGGAATTGCGGGCCTTCAAGTTATTGGGCTCAGTGTCTGATGGTCTGCTTATTCTCTTGAT
CAGGAACTGGAGCAGTTCGCGACGACCATCCATTGCAGATGCGCAGACATGGCGGGCGGCTCCCTTCGCAGCGGC
GACCTGACCTTCAGCGCCTCGGCTCCAGCGCCATGCGCGCCTCCAGGAAGTTCTTCGTTGGGGGAACTGGAAGA
TGAACGGGCGGAAGCAGAGTCTGGGGGAGCTCATCGGCACTCTGAACGCGGCCAAGGTGCCGGCCGACACCGAGG
TGGTTTGTGCTCCCCCTACTGCCTATATCGACTTCGCCCCGCGAGAAGCTAGATCCCAAGATTGCTGTGGCTGCGC
AGAAGTCTACAAAGTGACTAATGGGGCTTTTACTGGGGAGATCAGCCCTGGCATGATCAAGACTGCGGAGCCA
CGTGGGTGGTCTCTGGGCACTCAGAGAGAAGGCATGTCTTTGGGGAGTCAGATGAGCTGATTGGGCAGAAAGTGG
CCCATGCTCTGGCAGAGGGACTCGGAGTAATCGCCTGCATTGGGGAGAAGCTAGATGAAAGGGAAAGCTGGCATCA
CTGAGAAGGTTGTTTTTCGAGCAGACAAAGGTCATCGCAGATAACGTGAAGGACTGGAGCAAGGTCGTCCTGGCCT
ATGAGCCTGTGTGGGCCATTGGTACTGGCAAGACTGCAACACCCCAACAGGCCCAGGAAGTACACGAGAAGCTCC
GAGGATGGCTGAAGTCCAACGTCTCTGATGCGGTGGCTCAGAGCACCCGTATCATTATGGAGGCTCTGTGACTG
GGGCAACCTGCAAGGAGCTGGCCAGCCAGCCTGATGTGGATGGCTTCCTTGTGGGTGGTGTCTCCCTCAAGCCCG
AATTCGTGGACATCATCAATGCCAAACAATGAGGCCCATCCATCTTCCTTACCCTTCCTGCCAAGCCAGGGACTA
AGCAGCCCAGAAGCCCAGTAAGTGCCTTTCCCTGCATATGCTTCTGATGGTGTCTATCTGCTCCTTCCTGTGGCC
TCATCCAAACTGTATCTTCCTTTACTGTTTATATCTTCACCTGTAAATGGTTGGGACCAGGCCAATCCCTTCTCC
ACTTACTATAATGGTTGGAATAAACGTCACCAAGGTGGCTTCTCCTTGGCTGAGAGATGGAGGCGTGGTGGGA
TTTGCTCCTGGGTTCCTTAGGCCCTAGTGAGGGCAGAAGAGAAACCATCCTCTCCCTTCTTACACCGTGAGGCCA
AGATCCCCTCAGAAGGCAGGAGTGCTGCCCTCTCCCATGGTGCCCGTGCCCTCTGTGCTGTGTATGTGAACCAACC
ATGTGAGGGAATAAACCTGGCACTAGGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3461

MAPSRKFFVGGNWKMNGRKQSLGELIGTLNAAKVPADTEVVCAPPTAYIDFARQKLDPKIAVAAQNCYKVTNGAF
TGEISPGMIKDCGATWVVLGHSERRHVFGESDELIGQVAHALAEGLGVIACIGEKLDEREAGITEKVVFEQTKV
IADNVKDWSKVVLAYEPVWAIGTGKTATPQQAQEVHEKLRGWLKSNVSDAVAQSTRIIYGGSVTGATCKELASQP
DVDGFLVGGASLKPEFVDIINAKQ

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FIGURE 3462

GGAGAAGCTGCTGCCGGTGTCATGGCGGAGCTGAGTGAGGAGGCGCTGCTGTGTCAGTATTACCGACGATCCGGGTC
CCTAAGGCTGGAGACCGGGTCCACAAAGACGAGTGCGCCTTCTCCTTCGACACGCCGGAGTCTGAGGGGGGCCTC
TACATCTGTATGAACACGTTTCTGGGCTTTGGGAAACAGTATGTGGAGAGACATTTCAATAAGACCGGCCAGCGA
GTCTACTTGACCTCCGGCGGACCCGGCGCCCCGAAAGAGGAGGACCCTGCTACAGGCACTGGAGACCCACCCCGG
AAGAAGCCCCACGCGGCTGGCTATTGGTGTTGAAGGCGGATTTGACCTTAGCGAGGAGAAGTTTGAATTAGACGAG
GATGTGAAGATTGTCATTTTGCCAGATTACCTGGAGATTGCCCGGGATGGACTGGGGGGACTGCCTGACATTGTC
AGAGATCGGGTGACCAGTGCACTGGAGGCCCTACTGTGCGCCGACTCAGCCTCCCGCAAGCAGGAGGTGCAGGCA
TGGGATGGGGAAGTACGGCAGGTGTCTAAGCATGCCTTCAGCCTCAAGCAGTTGGACAACCCTGCTCGAATCCCT
CCCTGTGGCTGGAAGTGCTCCAAGTGTGACATGAGAGAGAACCTGTGGCTCAACCTGACTGATGGCTCCATCCTC
TGTGGGCGACGCTACTTCGATGGCAGTGGGGGCAACAACCACGCTGTGGAGCACTACCAGAGACAGGCTACCCG
TTAGCTGTCAAGCTGGGCACCATCACCCCTGATGGAGCTGACGTGTACTCATATGATGAGGATGACATGGTCCTG
GACCCACGCTGGCTGAGCACCTGTCCACTTCGGCATCGACATGCTGAAGATGCAGAAGACAGACAAGACGATG
ACTGAGTTGGAGATAGACATGAACCAGCGGATTGGTGAATGGGAGCTGATCCAGGAGTCAGGTGTGCCACTCAAG
CCCTGTTTGGGCTGGCTACACAGGCATCCGGAACCTGGGTAACAGCTGCTACCTCAACTCTGTGGTCCAGGTG
CTCTTCAGCATCCCTGACTTCCAGAGGAAGTATGTGGATAAGCTGGAGAAGATCTTCCAGAATGCCCCGACGGAC
CCTACCCAGGATTTGAGCACCCAGGTGGCCAAGCTGGGCCATGGCCTTCTCTCCGGGGAGTATTCCAAGCCAGTA
CCGGAGTCGGGCGATGGGGAGCGGGTGCCAGAACAGAAGGAAGTTCAAGATGGCATTGCCCTCGGATGTTCAAG
GCCCTCATCGGCAAGGGCCACCCTGAATTCTCCACCAACCGGCAGCAGGATGCCAGGAGTTCTTCTTCACCTT
ATCAACATGGTGGAGAGGAATTGCCGGAGCTCTGAAAATCCTAATGAAGTGTTCGCTTCTTGGTGGAGGAAAAG
ATCAAGTGCTGGCCACAGAGAAGGTGAAGTACACCCAGCGAGTTGACTACATCATGCAGCTGCCTGTGCCCATG
GATGCAGCCCTTAACAAAGAGGAGCTTCTGGAGTACGAGGAGAAGAAGCGGCAAGCCGAAGAGGAGAAGATGGCA
CTGCCAGAACTGGTTTCGGGCCCAGGTGCCCTTCAGCTCTTGCCCTGGAGGCCTACGGGGCCCTGAGCAGGTGAT
GACTTCTGGAGCACGGCCCTGCAGGCCAAGTCAGTAGCTGTCAAGACCACACGATTTGCCTCATTCCCTGACTAC
CTGGTCATCCAGATCAAGAAGTTACCTTCGGCTTAGACTGGGTGCCCAAGAACTGGATGTGTCCATCGAGATG
CCAGAGGAGCTCGACATCTCCCAGTTGAGGGGCGACAGGGCTGCAGCCCGGAGAGGAGGAGCTGCCAGACATTGCC
CCACCCCTGGTCACTCCGGATGAGCCCCAAAGCGCCCCATGCTGGATGAATCAGTCATCATCCAGCTGGTGGAGATG
GGATTCCCTATGGACGCTGCCGCAAAGCTGTCTACTACACGGGCAACAGCGGGGCTGAGGCCGCCATGAAGTGG
GTCATGTACACATGGATGATCCAGATTTTGCAAACCCCTCATCTGCCTGGCTCTAGTGGGCCGGGCTCCACA
AGCGCAGCAGCCGACCCCCCTCCTGAGGACTGTGTGACCACCATTTGCTCCATGGGCTTCTCCCGGGACCAAGCC
TTGAAAGCGCTGCGGGCCACGAACAATAGTTTAGAACGGGCTGTGGACTGGATCTTCAGTCACATTGACGACCTG
GATGCTGAAGCTGCCATGGACATCTCAGAGGGCCGCTCAGCTGCCGACTCCATCTCTGAGTCTGTGCCAGTGGGA
CCTAAAGTCCGGGATGGTCTGGAAGTATCAGCTCTTTGCCTTCATTAGTCACATGGGCACCTCTACCATGTGT
GGTCACTACGTCTGCCACATCAAGAAAGAAGGCAGATGGGTGATCTACAATGACCAGAAAGTGTGTGCCTCCGAG
AAGCCGCCCAAGGACCTGGGCTACATCTACTTCTACCAGAGAGTGGCCAGCTAAGAGCCTGCCTCACCCCTTACC
AATGAGGGCAGGGGAAGACCACCTGGCATGAGGGAGAGGGGCTGAGGGATGGACTTCAGCCCTCTGCTCTGTAC
CCTTTTCTCTTTGTCCCCGGCAGCAGGGAAGAAGCTGGAGGCCGTGGGAGAATGGCTGGGCAGAGCAGAGGGGC
AGCGATAGACTCTGGGGATGGAGCAGGACGGGGACGGGAGGGGCGGCCACCTGTCTGTAAGGAGACTTTGTTGC
TTCCCTGCCCCCGGAATCCACAGTGCTCTGCTTCTCTGTGTGCCCCGCCAGCCCCCTGGTGTGGAGGGAGGG
GTCTCGTTTGTGCGCGTGGGTGTAGCTTTGTGCATCCTCTCCAGTGGAGCGATCACCTGTGCCTCCCTCCCC
TTTGTTTGCCCCCTGTGTGGTTGGTCAAGGAGGGATGTGAGGGAATAGGGACCCCCGACTTGCCCTCCTGCCTC
AGTCTTTCCCCCACCCTGTCTCTTCTTGTCTTCTCTGGAATGCCAAAATACACGATGTGAATAAAGTACA
ACGGCT

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FIGURE 3463

CCACAATAGGGGCAGACCTGTCCATCCTTCTCTGTGGGTCCCCTGTACCTTTCTCCCCAACAGGATCAGACCCA
GAGGCAGCTGGTTGGGGTTTGTCTGAGAAGAAGGATTATCCAGATCAGTCCTTTCTAATCTCAGCTCCTGCCTGTA
CCCTCCCATACTACCAAACCTCTTCCCCACCACCCTGAGCTGAGGAGCACAGTTTGAGGCCCCCAACCCCC
CGCCGGTCGGGGCCAGGCCAGGCCAGGCCAGCTCCTCTGGCAGCAGAGCCTGGGCAGGTGACGGCGGGCGCGGG
CGTCGCAGCTGAGGGAGTAAGGAGGCTCCCAGGAACCGGAGCTGGAAACCCGGCCGAGGTCCAGCCAGAGCCCAA
GAGCCAGAGTGACCCCTCGACCTGTCAGCCATGGGGGAGATGGAGCAACTGCGTCAGGAAGCGGAGCAGCTCAAG
AAGCAGATTGCAGATGCCAGGAAAGCCTGTGCTGACGTTACTCTGGCAGAGCTGGTGTCTGGCCTAGAGGTGGTG
GGACGAGTCCAGATGCGGACGCGGGCGGACGTTAAGGGGACACCTGGCCAAGATTTACGCCATGCACTGGGCCACT
GATTCTAAGCTGCTGGTAAGTGCTCGCAAGATGGGAAGCTGATCGTGTGGGACAGCTACACCACCAACAAGGTG
CACGCCATCCCACTGCGCTCCTCTGGGTGATGACCTGTGCCTATGCCCCATCAGGGAACTTTGTGGCATGTGGG
GGGCTGGACAACATGTGTTCCATCTACAACCTCAAATCCCGTGAGGGCAATGTCAAGGTGAGCCGGGAGCTTTCT
GCTCACACAGGTTATCTCTCTGCTGCCGCTTCTGGATGACAACAATATTGTGACCAGCTCGGGGGACACCACG
TGTGCCTTGTGGGACATTGAGACTGGGCAGCAGAAGACTGTATTTGTGGGACACACGGGTGACTGCATGAGCCTG
GCTGTGTCTCCTGACTTCAATCTCTTCATTTTGGGGGCTGTGATGCCAGTGCCAAGCTCTGGGATGTGCGAGAG
GGGACCTGCCGTCAGACTTTCACTGGCCACGAGTCGGACATCAACGCCATCTGTTTCTTCCCAATGGAGAGGCC
ATCTGCACGGGCTCGGATGACGCTTCTGCGGCTTGTTTGACCTGCGGGCAGACCAGGAGCTGATCTGCTTCTCC
CACGAGAGCATCATCTGCGGCATCACGTCCGTGGCCTTCTCCCTCAGTGGCCGCCTACTATTGCTGGCTACGAC
GACTTCAACTGCAATGTCTGGGACTCCATGAAGTCTGAGCGTGTGGGCATCCTCTCTGGCCACGATAACAGGGTG
AGCTGCCTGGGAGTCAAGCTGACGGGATGGCTGTGGCCACAGGTTCTGGGACAGCTTCTCAAATCTGGAAC
TGAGGAGGCTGGAGAAAGGGAAGTGAAGGCAGTGAACACACTCAGCAGCCCCCTGCCCGACCCCATCTCATTCA
GGTGTCTCTTCTATATTCCGGGTGCCATTCCCACTAAGCTTTCTCCTTTGAGGGCAGTGGGGAGCATGGGACTG
TGCCTTTGGGAGGCAGCATCAGGGACACAGGGGCAAAGAACTGCCCCATCTCCTCCCATGGCCTTCCCTCCCCAC
AGTCCTCACAGCCTCTCCCTTAATGAGCAAGGACAACCTGCCCCCTCCCCAGCCCTTTGCAGGCCACGACACTTG
AGCTGAGGCCCCAGGCCCTAGGATTCTCCCCCAGAGCCACTACCTTTGTCCAGGCCTGGGTGGTATAGGGCGT
TTGGCCCTGTGACTATGGCTCTGGCACCCTAGGGTCTGGCCCTCTTCTTATTATGCTTTCTCCTTTTTCTAC
CTTTTTTCTCTCCTAAGACACCTGCAATAAAGTGTAGCACCTGGTA

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FIGURE 3464

MGEMEQLRQAEQLKKQIADARKACADVTLAELVSGLEVVGVRVQMRTRRTLRGHLAKIYAMHWATDSKLLVSASQ
DGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAPSGNFVACGGLDNMCSIYNLKSREGNVKVSRELSAHTGYLSCCR
FLDDNNIVTSSGDITTCALWDIETGQQKTVFVGHTGDCMSLAVSPDFNLFISGACDASAKLWDVREGTCRQTFTGH
ESDINAICFFPNGEAICTGSDDASCRLFDLRADQELICFSHESIICGITSVAFSLSGRLLFAGYDDFNCNVWDSM
KSERVGILSGHDNRVSCLGVTADGMAVATGSWDSFLKIWN

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FIGURE 3465

TACGCCCACAGTGAAGCATGCCAAGGTGTACACCTGGACTATCTGCAGTCGGGGATACACATCCCAGGAAACATA
CCTTATGAAACATATGCGCAAACACAACCCGCCTGATCTTCAGCAACAGGTGCAGGCAGCAGCAGCAGCGGCAGC
AGTGGCCCAGGCCCAGGCTCAAGCTCAAGCCCAGGCTCAGGCTCAGGCTCAAGCCCAGGCCCAGGCCCAGGCCTC
CCAGGCATCACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCCACCACCACACTTCCA
GTCTCCTGGGGCAGCCCCCAGGGTGGGGGTGGTGGGGACAGCAATCCCAACCCTCCACCCCAGTGTTCCCTTTGA
CCTGACCCCGTATAAGACGGCGGAGCATCATAAGGACATCTGCCTCACTGTCAACCACCAGCACCATCCAGGTGGA
GCACCTGGCCAGCTCTTAGAGATCCGTGCTGCCACCCACTGGGAAGAGGAAGAAGTAGTCCTGGTGTCTTCTTTT
TCCAACCTCTTGGTGGGAAAAGTCCTTTTCTTCTTGACAGGCCTTGGCTCCATCTCCTTGGGCCTCTGTACGGC
TTTCTTTCACAGGATACCATCCTTTTTTCTGAACTCTTCTTCAAAGGAACATCAGCCCTCCTGATTGCAAAGGAA
TACTGAGCTGATGGTGTTCATCCAGCAGCCTCCCTCCCAAGCAAAGCTTCTAAAAGTGGGGGTGGGTGCTCAAGG
GAAGGATTGCTATGACCTCATAGAACCTTGTCCAGTGTGGCCACTTACCCTATCCTTACCCTCCTTATCCTCAA
AGTTTGGGCTGATGTAAGACTAGAGGCTGGCCCTCCAGATAACAGAGAAAAGGGAGCCCCAAATGCAACCAGCC
TCTTGTTCTATTCTTGCCCTGCAAAGAACAGAGGTTTCTCAAATGCCTCAGTCCCTGAGAGCCATTTCTTCCCT
ACATCGTCTCACTTTGCTTCTTATTGACTGCTGGTAGAAGGAGATTTGGGGTAGGGGCTAGACCTCCTTTTATTT
GAAGGGGGCAAGGGCTGAGATGTGGTCCCCAAGGGGCCAGAAATCCCAAGTTGGTCACAGGTGGCTTAGAAGTG
TGTGTTATGGTTTTACGGATTTCTTGAAGCCTCTCTCCTTCTCTGCCTACAAAGACCCTATACTCTCAGTCTCC
CCAACCCACCCCCAAGGAGCTGTGGGAGGCTTTGTGTTATCTGTGAAACTCCAAAACAGGGGTGTGCGGAGAAG
GGAGAGTTCAAGGCAAACGCAAGGACTGGACTTAGCTCCCTAGGTGCCACAGTCAGATGCCGGACACGGATTTAT
ATATAAATATATATATATAAATATATTATACTCACTCATCACGGCCATCTTTGTTGTAACCATTCTGTGTTTAT
AAATGCATTATCTCTGAGAATTTTCATATTTGATGTTTTGTTTTATTTTTGTCTTTTTTCCCTCTCTCCACCCC
TGTCTCTAGCCACAGCATTTTTCTTTTTGTC

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FIGURE 3466

GCCGAGGGGGCGGTACGGAGGTGGCAGCTGTGGGAGGAGGCGGCGTGGAAGGCCGAGGAGCTCAAGCCCGGACCA
ATCCCCACGTTCCGGGCGCGACCCCTGACCCTGCAGCGTACCGGGAAGCGAAACCGGCCGGATGGGCCGCTGAGC
CCGAATCGGGCACTGTGTGGAGCCCCCTGGAGCTGAGATCAGGATGTTCCGCTTCATGAGGGACGTGGAGCCTGA
GGATCCCATGTTCTGTATGGATCCCTTTGCTATTACCGCTCAGCATATGAGCCGTATGTTGTGAGGTGGCTTTGG
ATATAGCCCCCTTCTCAGCATCACAGATGGCAACATGCCAGGGACCAGGCCTGCCAGCCGCCGGATGCAGCAGGC
TGGAGCTGTCTCCCCCTTTGGGATGCTGGGAATGTCGGGTGGTTTCATGGACATGTTTGGGATGATGAATGACAT
GATTGGAACATGGAACACATGACAGCTGGAGGCAATTGCCAGACCTTCTCATCTTCCACTGTCATCTCCTACTC
CAATACGGGTGATGGTGCCCCCAAGGTCTACCAAGAGACATCAGAGATGCGCTCGGCACCAGGCGGGATCCGGGA
GACACGGAGGACTGTTCCGGATTGAGACAGTGGACTGGAGCAGATGTCCATTGGGCATCACATCCGGGACAGGGC
TCACATCCTCCAGCGCTCCCGAAACCATCGCACGGGGGACCAGGAGGAGCGGCAGGACTATATCAACCTGGATGA
GAGTGAGGCCCGCAGCGTTTGATGACGAGTGGCGGCGGGAGACCTCCCGATTCCGGCAGCAGCGTCCCTGGAGTT
TCGGCGGCTTGAGTCTCAGGGGCTGGGGGACGAAGGGCGGAGGGGCCCTCCCGCCTGGCCATCCAGGGACCTGA
GGACTCCCCCTTCCCGACAGTCCCGCCGCTATGACTGGTGAAGGCCCGGGCCCTCAGCCTCTCTGTACAGGCTGA
GAGGCTGAGAAATCATCCCCTGAATAACTTTTTCTCTCGATTCCCATCCCCAATTTAATATTAAATTAACAGGC
AAGCCGGCCCCCACCTCTCCCTGGGGGTCTCAGGGAGAACCTTTCACGGCACCCCTTTCCTACCTTTTCCTTCTT
TAATCTCCTGGTTTACCATTGATGACTTCGCCTCTGCATCTACTGACTTGATTTTTCATTCTGCCACTCCATCTT
CAAACCCCCCTCACCTTTCCCATCTACTCTGCCATGCATTGAAGGGTCAATGCATTTTGGGGTGAGCTCTGGGT
TTAGGGGCCCCCTCCATCCCTCAGCTACCTTGATCTTTGCCACCTCTTCCTCAGAGCCCCACTGAGGGGCCG
TAGCCCTATCTAGGGCTGTGGAAGGAGCAGACTGGTTCCTAACTCTCTCCCTCCTCCTGCCACACACATCAAAA
GAATCTTCCCTACACCCTTCTCTGCCTTTATTTTTTGATTTGTGCAACTTGTAAGTAGGTGTTTATGGAATAAAG
GAGAATGGAAGAAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3467

MFRFMRDVEPEDPMFLMDPFAIHRQHMSRMLSGGFGYSPFLSITDGNMPGTRPASRRMQQAGAVSPFGMLGMSGG
FMDMF GMMNDMIGNMEHMTAGGNCQTFSSSTVISYSNTGDGAPKVYQETSEMRSAPGGIRETRRTVRDSDSGLEQ
MSIGHHIRDRAHILQSRNRHRTGDQEERQDYINLDESEAAAFDDEWRRETSRFRQQRPLEFRRLESSGAGGRRAE
GPPRLAIQGPEDSPSRQSRRYDW

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FIGURE 3468A

GCGGCTCCGGGTGACTCGGGCCAGTGTAGAGGTCTCAGGCCGCCGGCAGGAGCAGCTGGGCCAATTCCCTGGCC
GGGAGCGGAAGGGGATGCGCTCGGGCTGGGCTCCCCGTCCCCCTGCTCGGCGGGCAGTGAGGAGGAGGATATGG
ATGCACTTTTGAACAACAGCCTGCCCCACCCACCCAGAAAATGAAGAGGACCCAGAAGAGGATTTGTCAGAAA
CAGAGACTCCAAAGCTCAAGAAGAAGAAAAAGCCTAAGAAACCTCGGGACCCTAAAATCCCTAAGAGCAAGCGCC
AAAAAAGGAGCGTATGCTCTTATGCCGGCAGCTGGGGGACAGCTCTGGGGAGGGGCCAGAGTTTGTGGAGGAGG
AGGAAGAGGTGGCTCTGCGCTCAGACAGTGAGGGCAGCGACTATACTCCTGGCAAGAAGAAGAAGAAGACTTG
GACCTAAGAAAGAGAAGAAGAGCAAAATCCAAGCGGAAGGAGGAGGAGGAGGAGGATGATGATGATGATGATTCAA
AGGAGCCTAAATCATCTGCTCAGCTCCTGGAAGACTGGGGCATGGAAGACATTGACCACGTGTTCTCAGAGGAGG
ATTATCGAACCCTCACCAACTACAAGGCCTTCAGCCAGTTTGTGACACCCCTCATTGCTGCCAAAAATCCCAAGA
TTGCTGTCTCCAAGATGATGATGTTTGGGTGCAAAATGGCGGGAGTTTCACTACCAATAACCCCTTCAAAGGCA
GTTCTGGGGCATCAGTGGCAGCTGCGGCAGCAGCAGCGGTAGCTGTGGTGGAGAGCATGGTGACAGCCACTGAGG
TTGCACCACCACCTCCCCCTGTGGAGGTGCCTATCCGCAAGGCCAAGACCAAGGAGGGCAAAGGTCCCAATGCTC
GGAGGAAGCCCAAGGGCAGCCCTCGTGTACCTGATGCCAAGAAGCCTAAACCCAAGAAAGTAGCTCCCCTGAAAA
TCAAGCTGGGAGGTTTGGTTCCAAGCGTAAGAGATCCTCGAGTGAGGATGATGACTTAGATGTGGAATCTGACT
TCGATGATGCCAGTATCAATAGCTATTCTGTTTCTGATGGTTCCACCAGCCGTAGTAGCCGCAGCCGCAAGAAAC
TCCGAACCACTAAAAAGAAAAAGAAAGGCGAGGAGGAGGTGACTGCTGTGGATGGTTATGAGACAGACCACCAGG
ACTATTGCGAGGTGTGCCAGCAAGGCGGTGAGATCATCCTGTGTGATACCTGTCCCCGTGCTTACCACATGGTCT
GCCTGGATCCCGACATGGAGAAGGCTCCCGAGGGCAAGTGGAGCTGCCACACTGCGAGAAGGAAGGCATCCAGT
GGGAAGCTAAAGAGGACAATTTCGGAGGGTGAGGAGATCCTGGAAGAGGTTGGGGGAGACCTCGAAGAGGAGGATG
ACCACCATATGGAATTTCTGTCGGGTCTGCAAGGATGGTGGGGAACCTGCTCTGCTGTGATACCTGTCTTCTTCT
ACCACATCCACTGCCTGAATCCCCCACTTCCAGAGATCCCCAACGGTGAATGGCTCTGTCCCCGTTGTACGTGTC
CAGCTCTGAAGGGCAAAGTGCAAGATCCTAATCTGGAAGTGGGGTCAGCCACCATCTCCCACACCAGTGCCTC
GGCTCCAGATGCTGATCCCAACACGCCCTCCCCAAAGCCCTTGGAGGGGCGGCCAGAGCGGCAGTTCTTTGTGA
AATGGCAAGGCATGTCTTACTGGCACTGCTCCTGGGTTTCTGAACCTGCAGCTGGAGCTGCACTGTGAGGTGATGT
TCCGAAACTATCAGCGGAAGAATGATATGGATGAGCCACCTTCTGGGGACTTTGGTGGTGTGAAGAGAAAAGCC
GAAAGCGAAAGAAACAAGGACCCTAAATTTGCAGAGATGGAGGAACGCTTCTATCGCTATGGGATAAAACCCGAGT
GGATGATGATCCACCGAATCCTCAACCACAGTGTGGACAAGAAGGGCCACGTCCACTACTTGATCAAGTGGCGGG
ACTTACCTTACGATCAGGCTTCTTGGGAGAGTGAGGATGTGGAGATCCAGGATTACGACCTGTTCAAGCAGAGCT
ATTGGAACTACAGGGAGTTAATGAGGGGTGAGGAAGGCCGACCAGGCAAGAAGCTCAAGAAGGTGAAGCTTCGGA
AGTTGGAGAGGCCTCCAGAAACGCCAACAGTTGATCCAACAGTGAAGTATGAGCGACAGCCAGAGTACCTGGATG
CTACAGGTGGAACCTGCACCCCTATCAAATGGAGGGCTGAATTGGTTGCGCTTCTCCTGGGCTCAGGGCACTG
ACACCATCTTGGCTGATGAGATGGGCCTTGGGAAAACCTGTACAGACAGCAGTCTTCTGTATTCCCTTTACAAGG
AGGGTCATTCCAAAGGCCCTTCTTAGTGAGCGCCCTCTTTCTACCATCATCAACTGGGAGCGGGAGTTTGAAA
TGTGGGCTCCAGACATGTATGTCGTAACCTATGTGGGTGACAAGGACAGCCGTGCCATCATCCGAGAGAATGAGT
TCTCCTTTGAAGACAATGCCATTCTGTGGTGGCAAGAAGGCCTCCCGCATGAAGAAAGAGGCATCTGTGAAATTCC
ATGTGCTGCTGACATCCTATGAATTGATCACCATTGACATGGCTATTTTGGGCTCTATTGATTGGGCCTGCCTCA
TCGTGGATGAAGCCCATCGGCTGAAGAACAATCAGTCTAAGTTCTTCCGGGTATTGAATGGTTACTACTCCAGC
ACAAGCTGTTGCTGACTGGGACACCATTACAAAACAATCTGGAAGAGTTGTTTCATCTGCTCAACTTTCTACCC
CCGAGAGGTTCCACAATTTGGAAGGTTTTTGGAGGAGTTTGCTGACATTGCCAAGGAGGACCAGATAAAAAAAC
TGCATGACATGCTGGGGCCGCACATGTTGCGGCGGCTCAAAGCCGATGTGTTCAAGAACATGCCCTCCAAGACAG
AACTAATTGTGCGTGTGGAGCTGAGCCCTATGCAGAAGAAATACTACAAGTACATCCTCACTCGAAATTTTGAAG
CACTCAATGCCCGAGGTGGTGGCAACCAGGTGTCTGTGCTGAATGTGGTGTATGGATCTTAAGAAGTGTGCAACC
ATCCATACCTCTTCCCTGTGGCTGCAATGGAAGCTCCTAAGATGCCTAATGGCATGTATGATGGCAGTGCCTTAA
TCAGAGCATCTGGGAAATTATTGCTGCTGCAGAAAATCTCAAGAACCTTAAGGAGGGTGGGCATCGTGACTCA
TCTTTTCCAGATGACCAAGATGCTAGACCTGCTAGAGGATTTCTTGGAAACATGAAGGTTATAAATACGAACGCA
TCGATGGTGGAACTACTGGGAACATGCGGCAAGAGGCCATTGACCGCTCAATGCACCGGGTGCTCAGCAGTTCT
GCTTCTTGCTTTTCCACTCGAGCTGGGGGCCCTTGGAAATCAATCTGGCCACTGCTGACACAGTTATTATCTATGACT
CTGACTGGAACCCCATTAATGACATTAGGCCTTTAGCAGAGCTCACCGGATTGGGCAAAATAAAAAGGTAATGA

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FIGURE 3468B

TCTACCGGTTTGTGACCCGTGCGTCAGTGGAGGAGCGCATCACGCAGGTGGCAAAGAAGAAAAATGATGCTGACGC
ATCTAGTGGTGGGCTGGGCTGGGCTCCAAGACTGGATCTATGTCCAAACAGGAGCTTGATGATATCCTCAAAT
TTGGCACTGAGGAACATTCAAGGATGAAGCCACTGATGGAGGAGGAGACAACAAAGAGGGAGAAGATAGCAGTG
TTATCCACTACGATGATAAGGCCATTGAACGGCTGCTAGACCGTAACCAGGATGAGACTGAAGACACAGAATTGC
AGGGCATGAATGAATATTTGAGCTCATTCAAAGTGGCCAGTATGTGGTACGGGAAGAAGAAATGGGGGAGGAAG
AGGAGGTAGAACGGGAAATCATTAAACAGGAAGAAAGTGTGGATCCTGACTACTGGGAGAAATTGCTGCGGCACC
ATTATGAGCAGCAGCAAGAAGATCTAGCCCGAAATCTGGGCAAAGGAAAAAGAATCCGTAAACAGGTCAACTACA
ATGATGGCTCCCAGGAGGACCGAGATTGGCAGGACGACCAGTCCGACAACCAGTCCGATTACTCAGTGGCTTCAG
AGGAAGGTGATGAAGACTTTGATGAACGTTTCAAGCTCCCCGTAGGCCAGTCTGTAAGGGCCTGCGGAATGATA
AAGATAAGCCATTGCCCTCCTCTGTTGGCCCGTGTGGTGGGAATATTGAAGTACTTGGTTTTAATGCTCGTCAGC
GAAAAGCCTTTCTTAATGCAATTATGCGATATGGTATGCCACCTCAGGATGCTTTTACTACCCAGTGGCTTGTA
GAGACCTGCGAGGCAAATCAGAGAAAGAGTTCAAGGCATATGTCTCTCTTTTCATGCGGCATTTATGTGAGCCGG
GGGCAGATGGGGCTGAGACCTTTGCTGATGGTGTCCCCGAGAAGGCCTGTCTCGCCAGCATGTCCTTACTAGAA
TTGGTGTTATGTCTTTGATTGCAAGAAGGTTTCAAGGAGTTTGAACATGTTAATGGGCGCTGGAGCATGCCTGAAC
TGGCTGAGGTGGAGGAAAACAAGAAGATGTCCAGCCAGGGTCACCCCTCCCCAAAACTCCTACACCCCTCCACTC
CAGGGGACACGCAGCCCAACACTCCTGCACCTGTCCACCTGCTGAAGATGGGATAAAAAATAGAGGAAAAATAGCC
TCAAAGAAGAAGAGAGCATAGAAGGAGAAAAAGGAGGTTAAATCTACAGCCCTGAGACTGCCATTGAGTGTACAC
AGGCCCTGCCCCCTGCCTCAGAGGATGAAAAGGTCGTTGTTGAACCCCTGAGGGAGAGGAGAAAGTGGAAAAGG
CAGAGGTGAAGGAGAGAACAGAGGAACCTATGGAGACAGAGCCCAAAGGTGCTGCTGATGTAGAGAAGGTGGAGG
AAAAGTCAGCAATAGATCTGACCCCTATTGTGGTAGAAGACAAAGAAGAGAAGAAAGAAGAAGAGAAAAAAG
AGGTGATGCTTCAGAATGGAGAGACCCCCAAGGACCTGAATGATGAGAAACAGAAGAAAAATATTAAACAACGTT
TCATGTTTAACATTGCAGATGGTGGTTTTACTGAGTTGCACTCCCTTTGGCAGAATGAAGAGCGGGCAGCCACAG
TTACCAAGAAGACTTATGAGATCTGGCATCGACGGCATGACTACTGGCTGCTAGCCGGCATTATAAACCATGGCT
ATGCCCGGTGGCAAGACATCCAGAATGACCCACGCTATGCCATCCTCAATGAGCCTTTCAAGGGTGAAATGAACC
GTGGCAATTTCTTAGAGATCAAGAATAAATTTCTAGCTCGAAGGTTTAAAGCTCTTAGAACAAGCTCTGGTGATTG
AGGAACAGCTGCGCCGGGCTGCTTACTTGAACATGTCAGAAGACCCCTTCTACCCCTTCCATGGCCCTCAACACCC
GCTTTGCTGAGGTGGAGTGTTTGGCGGAAAGTCATCAGCACCTGTCCAAGGAGTCAATGGCAGGAAACAAGCCAG
CCAATGCAGTCCCTGCACAAAGTTCTGAAACAGCTGGAAGAACTGCTGAGTGACATGAAAGCTGATGTGACTCGAC
TCCCAGCTACCATTGCCCGAATTCCCCAGTTGCTGTGAGGTTACAGATGTCAGAGCGTAACATTCTCAGCCGCC
TGGCAAACCGGGCACCCGAACCTACCCACAGCAGGTAGCCAGCAGCAGTGAAGATGCAGACTGATACCACCTC
CACCGCTGAGCAGTGACCTTCCTCACTTTCTCTTGTCCCAGCTTCTCCCCCTGGGGGCCTGAGAGACCCCTCACCTT
CCTTCTGCCCATCTTCCATGTTGTAAAGGAACAGCCCCAGTGCCTGAGGGAGGGGAGGGAGTGGGGGCAGTGG
TGCCCTTCTTCGAGAAGAGACATGCAGCAGTAGCGCTGGCGCCATCTGCAGGAGCTGGCGGGCTGGCCTTCTGGA
CCCTGGCTTCTCCCCACTGTAACGCCTGTTACACACAACTGTTGTGGGTTCTTCCAGGCTTGAAGAAAATGAT
CTGAATTTTTCTCCTTTTGGTTTTATTTTGTGGTTTTATTTTGTGTTTTCTTTTCTCCTTTTTGGGGGTATT
CAGAGTGGGCTGGGCCCCTGGGCGAGACACAGCTACCTCTGTTGGCATCTTTTTAATACCAGGAACCCAGCGGCT
CTAGCCACTGAGCGGCTAAATGAAATAAAGTGGAAGAAAAAAGGAAAAAACCAAAAGCATAAAAAACCAC
AGCAAATTTCTTGATGAAAATTGAAAATAAAAGTTTCCTTGT

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FIGURE 3469

MASGLGSPSPCSAGSEEDMDALLNNSLPPPHNEEDPEEDLSETETPKLKKKKKPKKPRDPKIPKSKRQKKER
MLLCRQLGDSSGEGPEFVEEEEEEVALRSDSEGS DYTPGKKKKKKLGPKEKKSKSKRKEEEEDDDDDDSKEPKS
SAQLLEDWGMEDIDHVFSEEDYRTLNTYKAFSQFVRPLIAAKNPKIAVSKMMVLGAKWREFSTNNPFKGSSGAS
VAAAAAAAVAVVESMTATEVAPPPPPVEVP IRKAKTKEGKGNARRKPKGSPRPVDAKKPKPKKVAPLKIKLGG
FGSKRRSSSEDDDLVESDFDDASINSYSVSDGSTSRSSRSRKKLRITTKKKKKGEEVTAVDGYETDHDYCEV
CQQGGEIILCDTCPRAYHMCVCLDPDMEKAPEGKWSCPHCEKEGIQWEAKEDNSEGEEILEEVGGDLEEDDHME
FCRVCKDGGELLCCDTCPPSSYHIHCLNPPLPEIPNGEWLCPRCTCPALKGKVQKILIKWKGQPPSPTPVPRPPDA
DPNTPSPKPLEGRPERQFFVKWQMSYWHCSWVSELQLELHCQVMFRNYQRKNDMEPPSGDFGGDEEKSRRKN
KDPKFAEMEERFYRYGIKPEWMMIHRILNHSVDKKGHVHYLIKWRDLFYDQASWESEDVEIQDYDLFKQSYWNHR
ELMRGEEGRPGKKLKKVLRKLERPPETPTVDPTVKYERQPEYLDATGGTLHPYQMEGLNWLRFSWAQGTDITLA
DEMGLGKTVQTAVFLYSLYKEGHSKGPFLVSAPLSTIINWEREFEMWAPDMYVVTVYVGDKDSRAIIRENEFSFED
NAIRGGKKASRMKKEASVKFHVLLTSYELITIDMAILGSIDWACLIVDEAHLKNNQSKFFRVLNGYSLQHKL
TGTPLONNLEELFHLNFLTPERFHNLEGFLEEFADIKEDQIKKLHMLGPHMLRRLKADVFNMPSKTELIVR
VELSPMQKKYKYILTRNFEALNARGGNGQVSLNVMMDLKKCCNHPYLPVAAAMEAPKMPNGMYDGSALIRASG
KLLLLQKMLKNLKEGGHRLVIFSQMTKMLDLEDLEHEGYKYERIDGGITGNMRQEAIIDRFNAPGAQQFCFLS
TRAGGLGINLATADTVIIYDSDNPHNDIQAFSRAHRIGQNKVMIYRFVTRASVEERITQVAKKKMMLTHLVVR
PGLGSKTGSMKQELDDILKFGTEELFKDEATDGGGDNKEGEDSSVIHYDDKAIERLLDRNQDETEDELQGMNE
YLSSEFKVAQYVVRREEEMGEEEEVEREIIKQEESVDPDYWEKLLRHHEQQQEDLARNLGKGRIRKQVNYNDGSQ
EDRDWQDDQSDNQSDYSVASEEGDEDFDERSEAPRRPSRKGLRNDKDKPLPPLARVGGNIEVLGFNARQRKAFL
NAIMRYGMPPQDAFTTQWLVRDLRGKSEKEFKAYVSLFMRHLCEPGADGAETFADGVPREGLSRQHVLTRIGVMS
LIRKKVQFEFEHVNGRWSMPELAEVEENKKMSQPGSPSPKPTPTPSTPGDTQPNTAPAPVPPAEDGIKIEENSLKEEE
SIEGEKEVKSTAPETAIECTQAPAPASEDEKVVVEPPEGEEKVEKAEVKERTEEPMETEPKGAADVEKVEEKSAI
DLTPIVVEDKEEKKEEEEKKEVMLQNGETPKDLNDEKQKKNIKQRFMFNIADGGFTELHSLWQNEERAATVTKKT
YEIWHRRHDYWLLAGIINHGYARWQDIQNDPRYAILNEPFKGEMNRGNFLEIKNKFLARRFKLLEQALVIEEQLR
RAAYLNMSEDPSHPSMALNTRFAEVECLAESHQHSKESMAGNKPANAVLHKVLKQLEELLSDMKADVTRLEPATI
ARIPPVAVRLQMSERNILSRLANRAPEPTPQQVAQQQ

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FIGURE 3470

CACCGGTCTGCATCTCCCAGCAGAAGGGCGAGCCATGAATCCGTTATTTCGGCCCCAACCTCTTCCTCCTGCAGCA
GGAGCAGCAGGGCCTGGCCGGGCGGCACTGGGGGACTACTGGGAGGCGACCACTTCGCCGGGGGAGGAGACTTGCC
CCCGGCGCCTCTCTCGCCGGCCGGCCCTGCTGCCTACTCGCCGCCGGGCGGGCCCGGCCCTGCCGCCAT
GGCCCTCCGCAATGACCTGGGCTCCAACATCAACGTGCTCAAGACCCTGAACCTCCGGTTCGGCTGCTTCCTGGC
CAAGGTGCATGAGCTGGAGCGCCGGAACCGGCTGTTGGAGAAGCAACTGCAGCAAGCGCTGGAGGAGGGTAAGCA
GGGCCGGCGGGGCTGGGTGCTCGCGACCGAGGAGTGCAGACCGGCTTCGTCAGCCCCATCCGGCCCCCTGGGGCT
GCAGCTGGGCGCCCGCCGGCCGCTGTCTGCAGCCCTTCGGCGCGCGTGTCTGGGCTCGCCCGCGCGCTCCCCGGC
CGGCCCCCTCGCGCCCTCCGCGGCCAGCCTCTCGTGTCTCTCCACCTCCACCTCCACCACCTATTCTCGTGGC
CCGCTTCATGCCCCGGCACCATCTGGTTCGTTCTCGCACGCCCGCCGGCTCGGGCCGGGACTGGAGCCCACTCTGGT
GCAAGGGCCTGGCTTGTCTGGGTGCACCCGGATGGGGTGGGCGTCCAGATCGACACCATCACGCCCGAGATCCG
CGCTCTCTACAACGTGCTGGCCAAAGTGAAGCGGGAGCGGGACGAGTACAAGCGGAGATGCTTTTACAGGGTTAA
ATGATACCACAAGAGGCAGGGCAGCGGGCTCGACGAGCTCTGTTCTGGTGCGGGCAGGAGGCGGGAGCCCGGATC
TGTGCGACTGAAGGTGGGAAGAGGAGTACACGGTGCAGATCCAGCTGCAAGACCGTGTAAATGAGCTCCAGGAGG
AAGCCCAGGAGGCTGATGCCTGCCAGGAGGAGCTGGCACTGAAGGTGGAACAGTTGAAGGCTGAGCTGGTGGTCT
TCAAGGGGCTCATGAGTAACAACCTGTGCGAGCTGGACACCAAGATCCAGGAGAAAGCCATGAAGGTGGATATGG
ACATCTGCCCGCCGCATCGACATCACGCCAAGCTCTGCGATGTGGCTCAGCAGCGCAACTGCGAGGACATGATCC
AGATGTTCCAGGTCCCATCCATGGGGGGGCGGAAGCGGGAGCGCAAGGCTGCCGTCGAGGAGGACACCTCCCTGT
CGGAGAGTGAGGGGCCCCGCCAGCCCGATGGGGATGAGGAGGAGAGCACAGCCCTCAGCATCAACGAGGAGATGC
AGCGCATGCTCAACCAGCTGAGGGAGTATGATTTTGAGGACGACTGTGACAGCCTGACTTGGGAGGAGACTGAGG
AGACCTGCTGCTTTGGGAGGATTTCTCAGGCTATGCCATGGCAGCTGCAGAGGCCAGGGAGAGCAGCAGGAAG
ATAGCCTGGAGAAGGTGATTAAAGATACGGAGTCCCTGTTTCAAACCCGGGAGAAGGAGTATCAGGAGACCATTG
ACCAGATAGAGCTGGAGTTGGCCACGGCCAAGAACGACATGAACCGGCACCTGCACGAGTACATGGAGATGTGCA
GCATGAAGCGCGGCTGGACGTGCAGATGGAGACCTGCCGCCGGGCTCATCACCCAGTCTGGAGACCGAAAGTCTC
CTGCTTTTCACTGCGGTCCCGCTTAGCGACCCGCCGCCGCCGCAAGCGAGGCTGAGGACTCCGATCGCGATGTCT
CATCTGACAGCTCCATGAGATAGAGACCTGCCTCCCCCTTGACCCGAGGCCCTCGCAGCAGGGAGCTCAGCGAG
GCAGAGGGTGGGGCTGCACAGAGGGGAACATCAGCTGCAGCTCTGCACCAGGCCGGTCCCTGGGGACTGGGGCGC
TCTTCCCTCAGGCTTTCTCCCTCAGTCTTGCTTCTCCAGGGCTCTGGGGTGTCTGGAGCTAGGCTTGGCCCTAC
CATCTGGGGCCATTTCCACCACAGTTGGGGCTCTCCTGCCTTACGCGTGGGTGTCTGTCTACTTCCCCATCTTT
AAAAATGCTGCCAGAGCGATTGCGGCCCTCACCTTGTCCACGTATCAGGAATGTGAATGTGGGACCTTTCCCTCA
TCCCTGTTGTCCGGAGCCAGCTCACTGTCTTCCACACTGGTGCTAACTGGCCCAGGCACTGGAGTGGAAATAGAAT
GCAGCTGGAGGCTACGCATGGCCTCTGCAGCACACGCAGCTGGAGAGGGCTTCTGTCCCTGTGAGCGGCAGAGGG
CGTTGGGGCTGGCCGGGGCACCTTGTCCCTGCTATGGTCCACATGCTCACGCTGTCCACCTGCCAGGTGGAGTGT
ATGTGGCTGTGGCCCTCCCTCGTGGAGGTGCCGTGCTTTAAAGAGGCCCTTAGTGCCCGGATGGGCACAGTGT
TGAAGGGAGGTGGGAGCTCTTGCTCTCTGGTCACTGCAGAATGACAGAGAAGGTGAAGCTCCATGCATGTGTGC
GCGGGTGTATGTGCGCTCAGGGTCTCTGTTTAAAGTATCAGCTAAAGATGTGCTTCTCCGTGTCTGTATACACT
GAGACCAACAGGCTACAGTGTCCCTGATTCTTGAAAAGCCTGGAGAAGCTGGGGAGATGCGGTTTACAATGCCT
CGGTATAGGAGGCTGTGTTGAGCTGACATTCAAATGGATTCTTTAATAATAATGAACTGGCGAGTAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3471

MNPLFGPNLFLLLQQEQQGLAGPLGDSLGGDHFAGGGDLPPAPLSPAGPAAYSPPGPGPAPPAAMALRNDLGSNIN
VLKTLNLRFRCLAKVHELERRNRLLEKQLQQALEEGKQGRRLGRRDQAVQTGFVSPIRPLGLQLGARPAAVCS
PSARVLGSPARSPAGPLAPSAASLSSSSTSTSTTYSSSARFMPGTIWSFSHARRLGPGLEPTLVQGPGLSWVHPD
GVGVQIDTITPEIRALYNVLAKVKRERDEYKRRCFYRVK

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FIGURE 3472

GGTTGAGCACAGGGTACTTTATTGATGGTACATGACAAGGTGCGGCTCCCTAGGCCCTCCCCTCTTCAAGGGGT
CTACATGGCAACTGTGAGGAGGGGAGATTTCAGTGTGGTGGGGGACTGAGTGTGGCAGGGACTCCCCAGCAGTGAG
GGTCTCTCTCTTCCCTCTTGTGCTCTTGTGCGGGCTGGTGGTCCAGGGGTCTTACTCCTTGGAGGCCATGTGGGCC
ATGAGGTCCACCACCTGTGCTGTAGCCAAATTCGTTGTATACCAGGAAATGAGCTTGACAAAGTGGTTCGTTG
AGGGCAATGCCAGCCCCAGCGTCAAAGGTGGAGGAGTGGGTGTCGCTGTTGAAGTCAGAGGAGACCACCTGGTGC
TCAGTGTAGCCCAGGATGCCCTTGAGGGGGCCCTCCGACGCCTGCTTCACCACCTTCTTGATGTCATCATATTTG
GCAGGTTTTTCTAGACGGCAGGTTCAGGTCCACCCTGACACGTTGGCAGTGGGGACACGGAAGGCCATGCCAGTG
AGCTTCCCGTTTCAGCTCAGGGATGACCTTGCCACAGCCTTGGCAGCGCCAGTAGAGGCAGGGATGATGTTCTGG
AGAGCCCCGCGGCCATCACGCCACAGTTTCCCGGAGGGGCCATCCACAGTCTTCTGGGTGGCAGTGATGGCATGG
ACTGTGGTTCATGAGTCCTTCCACGATACCAAAGTTGTATGGATGACCTTGGCCAGGGGTGCTAAGCAGTTGGTG
GTGCAGGAGGCATTGCTGATGATCTTGAGGCTGTTGTCATACTTCTCATGGTTACACCCATGACGAACATGGGG
GCATCAGCAGAGGGGGCAGAGATGATGACCCTTTTGGCTCCCCCTGCAAATGAACCCAGCCTTCTCCATGGTG
GTGAAGACGCCAGTGGACTCCACGACGTACTCAGCGCCAGCATCGCCCCACTTGATTTTGGAGGGATCTCACTCC
TGGAAGATGGTGATGGGATTTCCATTGATGACAAGCTTCCCGTTCTCAGCCTTGACGGTGCCATGGAATTTGCCA
TGGGTGGAATCATATTGGAACATGTAAACCATGTAGTTGAGGTCAATGAAGGGGTTCATTGATGGCAACAATATCC
ACTTTACCAGAGTTAAAAGCAGCCCTGGTGACCAGGCGCCCAATACGACCAAATCCGTTGACTCCGACCTTCACC
TTCCCCATGGTGTCTGAGCGATGTGGCTCGGCTGGCGACGAAAAGAAGATGCGGCTGACTGTCTGAAC

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FIGURE 3473

CTCTCTGCTCCTCCTGTTTCGACAGTCAGCCGCATCTTCTTTTGGCTCGCCAGCCGAGCCACATCGCTCAGACACC
ATGGGGAAGGTGAAGGTCGGAGTCAACGGATTTGGTCGTATTGGGCGCCTGGTCACCAGGGCTGCTTTTAACTCT
GGTAAAGTGGATATTGTTGCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTTCCAATATGAT
TCCACCCATGGCAAATTCATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCAATGGAATCCCATCACC
ATCTTCCAGGAGCGAGATCCCTCCAAAATCAAGTGGGGCGATGCTGGCGCTGAGTACGTGCTGGAGTCCACTGGC
GTCTTCACCACCATGGAGAAGGCTGGGGCTCATTTGCAGGGGGGAGCCAAAAGGGTCATCATCTCTGCCCCCTCT
GCTGATGCCCCCATGTTTCGTCAATGGGTGTGAACCATGAGAAGTATGACAACAGCCTCAAGATCATCAGCAATGCC
TCCTGCACCACCACTGCTTAGCACCCCTGGCCAAGGTCATCCATGACAACCTTTGGTATCGTGGGAAGGACTCATG
ACCACAGTCCATGCCATCACTGCCACCCAGAAGACTGTGGATGGCCCCCTCCGGGAAACTGTGGCGTGATGGCCGC
GGGGCTCTCCAGAACATCATCCCTGCCTCTACTGGCGCTGCCAAGGCTGTGGGCAAGGTCATCCCTGAGCTGAAC
GGGAAGCTCACTGGCATGGCCTTCCGTGTCCCCACTGCCAACGTGTCAGTGGTGGACCTGACCTGCCGTCTAGAA
AAACCTGCCAAATATGATGACATCAAGAAGGTGGTGAAGCAGGCGTCGGAGGGCCCCCTCAAGGGCATCCTGGGC
TACACTGAGCACCAGGTGGTCTCCTCTGACTTCAACAGCGACACCCACTCCTCCACCTTTGACGCTGGGGCTGGC
ATTGCCCTCAACGACCACCTTTGTCAAGCTCATTTTCTGGTATGACAACGAATTTGGCTACAGCAACAGGGTGGTG
GACCTCATGGCCACATGGCCTCCAAGGAGTAAGACCCCTGGACCACCAGCCCCAGCAAGAGCACAAGAGGAAGA
GAGAGACCCCTCACTGCTGGGGAGTCCCTGCCACACTCAGTCCCCACCACACTGAATCTCCCCCTCTCACAGTTG
CCATGTAGACCCCTTGAAGAGGGGAGGGGCCTAGGGAGCCGCACCTTGTATGTACCATCAATAAAGTACCCTGT
GCTCAACC

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FIGURE 3474

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVINGNPIT
IFQERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHLQGGAKRVIIISAPSADAPMFVMGVNHEKYDNSLKIISNA
SCTTNCLAPLAKVIHDNFGIVEGLMTTVHAI TATQKTVDGPSGKLWRDGRGALQNIIPASTGAAKAVGKVIPELN
GKLTGMAFRVPTANVSVDLTCRLEKPAKYDDIKVVKQASEGPLKGILGYTEHQVSSDFNSDTHSSTFDAGAG
IALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE

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FIGURE 3475A

AAGTTTTGGAGCGCCGGACAAGCTGAGGTCCGCGACTCGTCGCTAAGATTCCCCAAAAGTGAAGATTTCAAGAAAA
TTCACCCCTTTCCGCTTTCTTTGGCGTCCCTTCAACCGTGAAGGAAATGAAGGTTGAGAACCTGGAACCCGCTTCCA
ATGACCAAGCCCTTTCTCTGTGCCTCACAACAGTCTTCCGCTGTAGCTGTTTTTATTACCCCTATTTTACTACTG
GGGAGGAGATTTGAGGTCTGAAAGTGAAGTGAAGTGTGCTGGACGTCACTTAGCAGAGGAGATGGCGAAACCTGGA
TTAGAGGCGATGCCCTTCTAACTCCAGCGTGGACTTGCCTCCTTTCTGGGGGTGACTGAATGCCAGCCAGGGA
CGCGACGTCTCTGGCCAGCAGAAATACGGCCTCCTCCCCGCCGACTGGGCAAAGGGGGACCTTGCGCCAAGGAG
GGATTTCGAGGCGGGCCGGGGGTGGGAGCGGGGGCCGGAGCCGGAGCCTTGGCCCGCCCCGGGCGGCGCTGTGA
TTGGCCGGCCGCTCCGGCGGGCGTTCGCGATTGGCCGTCTGCAGCCGTTGAGATTTGAACTCGGTATTTGTGGCT
TTGCCCGCGCGTTGCCAGACTCAGAGGCGGCCCTTTGCCTCTGCCTGCCGGGGATTGGCCGGATTCTCCGCCGAC
TTGAAAAGTGCCTTGCTAATTGGTGCCTGTTGTGCACGCGTGTTTTTCTTTTTCATTTACGCTGACTGCCGA
ATCAGAGCCGCGGGTGAGATCCCCAGCCCTGTGAGCCTGTAGGAGTAGAATGGCTCCCCAAATGTATGAGTTCCA
TCTGCCATTATCCCCAGAGGAGTTGTTGAAAAGTGGAGGGGTGAATCAGTATGTTGTGCAAGAGGTACTGTCCAT
CAAACATCTTCCACCACAGCTTAGAGCTTTTTCAGGCTGCCCTTCGAGCTCAGGGGCCCTGGCTATGCTGCAGCA
CTTTGATACTATCTACAGCATTTTGCATCACTTTCGAAGTATAGATCCTGGCCTCAAAGAAGATACTCTGCAATT
CCTGATAAAAGTGGTATCCCGCCACTCCAGGAGCTTCCAGCTATCCTGGATGATACAACTTTGAGTGGATCAGA
TAGAAACGCCCATCTAAATGCCCTCAAATGAAGTGTATGCTCTGATACGCTCCTTGGAAATCCTTTGAGACCAT
GGCCAGCCAGACAAACCTTGTGGACCTGGACCTTGGTGGGAAGGGTAAGAAAGCTCGGACCAAGGCAGCCCATGG
CTTTGACTGGGAAGAAGAGAGGCAACCAATTCTTCAGCTTTTAAACACAGCTACTTCAGTTGGACATCCGTCACCT
GTGGAACCACTCAATAATTGAAGAAGAATTGTGAGTTTGGTTACTGGCTGTTGCTACCGCCTTCTGGAGAATCC
CACCATTAAATCACCAGAAGAACCGCCCACTCGGGAAGCCATAACACACCTGCTTGGTGTAGCCTTGACCCGTTA
TAACCATATGCTCAGTGCTACAGTGAAGTATCCAGATGCTGCAGCACTTTGAACACCTGGCACCTGTACTGGT
TGCAGCCGTGAGTCTATGGGCAACTGACTATGGAATGAAGAGCATAGTGGGAGAGATTGTAAGAGAGATTGGACA
AAAGTGTCCCAAGAGCTGAGTCGAGACCCTTCAGGGACAAAGGGCTTTGCAGCATTCTTGACAGAACTAGCAGA
ACGTGTCCAGCTATCCTGATGTCCAGCATGTGCATTTTGTAGATCACCTGGATGGAGAAAATTACATGATGCG
TAATGCTGTGCTGGCAGCCATGGCGGAGATGGTGTGAGGTTCTCAGTGGCGATCAACTGGAAGCAGCAGCCCG
AGACACCAGAGACCAGTTCTTGGATACTTTACAAGCCCATGGCCATGATGTCAACTCCTTTGTGCGGAGCCGTGT
TTTGAGCTCTTACCCGAATTGTCCAGCAGAAGGCTCTCCCCCTGACACGTTTCCAGGCAGTGGTGGCTTTAGC
TGTGGGACGTCTGGCAGACAAGTCAGTGCTAGTATGTAAAAATGCCATCCAGCTGCTGGCCAGTTTTCTAGCCAA
TAATCCTTTCTCTGCAAGCTTAGTGATGCTGACCTTGCCGGACCACTGCAGAAAGGAGACCCAGAAATTACAAGA
GATGAGGGCCAGAGGCGAACTGCAGCAGCTTCTGCAGTGCTGGACCCAGAGGAGGAGTGGGAAGCCATGCTGCC
AGAGTTGAAGTCTACCTGCAGCAGCTTCTACAGCTTCCCCAGGGAGAGGAGGAGATTCTTGAGCAAATTGCCAA
TACAGAGACAAGTGAAGATGTGAAAGGACGATCTATCAACTGCTTGCCAAAGCTAGTTACAAAAAGGCCATCAT
TCTCACTCGAGAAGCCACAGGCCACTTCCAGGAGTCCGAACCCCTTCAGTCATATAGACCCAGAGGAGTCAGAGGA
GACCAGGCTCTTGAATATCTTAGGACTTATCTTCAAAGGCCAGCAGCTTCCACACAAGAAAAGAAATCCCCGGGA
GTCTACAGGAAACATGGTCACAGGACAGACTGTCTGTAAAAATAAACCAATATGTCGGATCCTGAGGAATCCAG
GGGAAATGATGAACTAGTGAAGCAGGAGATGCTGGTACAGTATCTGCAGGATGCCTACAGCTTCTCCCGGAAGAT
TACAGAGGCCATTGGCATCATCAGCAAGATGATGTATGAAAACACAACACTACAGTGGTGCAGGAGGTGATTGAATT
CTTTGTGATGGTCTTCCAATTTGGGGTACCCAGGCCCTGTTTGGGGTGCGCCGTATGCTGCCTCTCATCTGGTC
TAAGGAGCCTGGTGTCCGGGAAGCCGTGCTTAATGCCTACCGCAACTCTACCTCAACCCCAAAGGGGACTCTGC
CAGAGCCAAGGCCAGGCTTTGATTGAGAATCTCTCTCTGCTGCTAGTGGATGCCTCGGTTGGGACCATTCAGTG
TCTTGAGGAAATTCTCTGTGAGTTTGTGCAGAAGGATGAGTTGAAACCAGCAGTGACCCAGCTGCTGTGGGAGCG
GGCCACCGAGAAGGTGCGCTGCTGTCTCTGGAGCGCTGTTCCTCTGTATGCTTCTTGGCATGATGGCAGGAG
AAAGCCAGAAATTGTGGGAAGCAATTTAGACACACTGGTGAAGCATAGGGCTGGATGAGAAGTTTCCACAGGACTA
CAGGCTGGCCAGCAGGTGTGCCATGCCATTGCCAACATCTCGGACAGGAGAAAGCCTTCTCTGGGCAACGCTCA
CCCCCCTTCCGGCTGCCTCAGGAACACAGGTTGTTTGGCGACTGCGGGAGACAGTCACAAAAGGCTTTGTCCA
CCCAGACCCACTCTGGATCCCATTTCAAAGAGGTGGCAGTGACCCCTCATTTACCAACTGGCAGAGGGCCCCGAAGT
GATCTGTGCCAGATATTGCAGGGCTGTGCAAAACAGGCCCTGGAGAAGCTAGAAGAGAAGAGAACCAGTCAGGA
GGACCCGAAGGAGTCCCCCGCAATGCTCCCCACTTTCTGTTGATGAACCTGCTGTCCCTGGCTGGGGATGTGGC

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FIGURE 3475B

TCTGCAGCAGCTGGTCCACTTGGAGCAGGCAGTGAGTGGAGAGCTCTGCCGGCGCCGAGTTCTCCGGGAAGAACA
GGAGCACAAAGACCAAAGATCCCAAGGAGAAGAATACGAGCTCTGAGACCACCATGGAGGAGGAGCTGGGGCTGGT
TGGGGCAACAGCAGATGACACAGAGGCAGAATAATCCGTGGCATCTGCGAGATGGAAGTGTGGATGGCAAACA
GACACTGGCTGCCTTTGTTCACCTCTTGCTTAAAGTCTGTAACAACCCAGGCCTCTATAGCAACCCAGACCTCTC
TGCAGCTGCTTCACTTGGCCCTTGGCAAGTTCTGCATGATCAGTGCCACTTTCTGCGACTCCCAGCTTCGTCTTCT
GTTACCATGCTGGAAAAGTCTCCACTTCCCATTTGTCGGTCTAACCTCATGTTTGGCACTGGGGATCTGGCCAT
CCGCTTTCCCAATCTGGTGGACCCCTGGACTCCTCATCTGTATGCTCGTCTCCGGGACCCCTGCTCAGCAAGTGCG
GAAAACAGCGGGGCTGGTGATGACCCACCTGATCCTCAAGGACATGGTGAAGGTGAAGGGGCAGGTCAGCGAGAT
GGCGGTGCTGCTCATCGACCCCGAGCCTCAGATTGCTGCCCTGGCCAAGAATTCTTCAATGAGCTCTCCACAA
GGGCAACGCAATCTATAATCTCCTTCCAGATATCATCAGCCGCTGTGAGACCCGAGCTGGGGGTGGAGGAAGA
GCCTTTCCACACCATCATGAAACAGCTCCTCTCCTACATCACCAAGGACAAGCAGACAGAGAGCCTGGTGGAAAA
GCTGTGTGTCAGCGGTTCGCGACATCCCGAACTGAGCGGCAGCAGCGAGACCTGGCCTACTGTGTGTACAGCTGCC
CCTCAGAGAGCGAGGCCTCCGTAAGATGCTTGACAATTTTGACTGTTTTGGAGACAACTGTGAGATGAGTCCAT
CTTCAGTGCTTTTTTGTGAGTTGTAGGCAAGCTGCGACGTGGGGCCAAGCCTGAGGGCAAGGCTATAATAGATGA
ATTTGAGCAGAAGCTTCGGGCCTGTACATACCAGAGGTTTGATGGAATCAAGGAGCTTGAGATTGGCCAAGCAGG
TAGCCAGAGAGCGCCATCAGCCAAGAAACCATCCACTGGTTCTAGGTACCAGCCTCTGGCTTCTACAGCCTCAGA
CAATGACTTTGTGTCACACCAGAGCCCCGCCGTACTACCCGTCCGCATCCAAACACCCAGCAGCGAGCTTCCAAAAA
GAAACCCAAAAGTTGTCTTCTCAAGTGATGAGTCCAGTGAGGAAGATCTTTCAGCAGAGATGACAGAAGACGAGAC
ACCCAAGAAAAACAACCTCCCATTTCTCAGAGCATCGGCTCGCAGGCACAGATCCTAGGAAGTCTGTTCTCTCTCC
CTGTGCAGGGTATCCTGTAGGGTGACCTGGAATTCTGAATTTCTGTTTTCCCTTGTAATAATTTTGTCTGTCTCTTTT
TTTTAAAAAAAAAAAAAGGCCGGGCACTGTGGCTCACGCCTGTAATCCCAGCACTTTGCGATACCAAGGCGGGTGG
ATAACCTGAGGTAGGGAGTTGAGAGCCAGCCTGACCAACATGGAGAAACCCCATCTCTACTAAAAATAAAAAATT
AGCCGGGCGTATTGGCGTGCGCCTGTAATCCCAGCTACTCAAGAGGCTGAGGCAGGAGAATCGCCTGAACCCAGA
GGCGGAGGTTGTAGTGAGCCGAAATCACACCATTGCACTCCAGCTTGGGCAACAATAGCGAACCTCCATCTCAA
TTAAAAAAAAAATGCCTACACGCTCTTTAAATGCAAGGCTTTCTCTTAAATTAGCCTAACTGAAGTGCCTTGAG
CTGCTTCAACTTTGGAATATATGTTTGCCAATCTCCTTGTTTTCTAATGAATAAATGTTTTTATATACTTTT

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FIGURE 3476

GCCCTGGAGGCCCCGGCCTGGCCGCTCCCGGCCCTGGGGTGCACATCGGCCCTGAGTCCCGTCCCAGGCTCTGGGC
TCGGGCAGCCGCCGCCACCGCTGCCCAGGACGTGGGGCTCCTGCCTTCCTCCCAGGCCCCCACGTTGCTGGCCG
CCTGGCCGAGTGGCCGCCATGCTCCTGCCTTGGGCCACCTCTGCCCCCGGCCCTGGCCTGGGGGCCTCTGGTGCTG
GGCCTCTTCGGGGCTCCTGGCAGCATCGCAGCCCCAGGCGGTGCCTCCATATGCGTCGGAGAACCAGACCTGCAGG
GACCAGGAAAAGGAATACTATGAGCCCCAGCACCGCATCTGCTGCTCCCGCTGCCCGCCAGGCACCTATGTCTCA
GCTAAATGTAGCCGCATCCGGGACACAGTTTGTGCCACATGTGCCGAGAATTCTTACAACGAGCACTGGAACCTAC
CTGACCATCTGCCAGCTGTGCCGCCCTGTGACCCAGTGTAGGGCCTCGAGGAGATTGCCCCCTGCACAAGCAAA
CGGAAGACCCAGTGCCGCTGCCAGCCGGGAATGTTCTGTGCTGCCTGGGCCCTCGAGTGTACACACTGCGAGCTA
CTTTCTGACTGCCCGCCTGGCACTGAAGCCGAGCTCAAAGATGAAGTTGGGAAGGGTAACAACCACTGCGTCCCC
TGCAAGGCAGGGCACTTCCAGAATACCTCCTCCCCAGCGCCCGCTGCCAGCCCCACACCAGGTGTGAGAACCAA
GGTCTGGTGGAGGCAGCTCCAGGCACTGCCAGTCCGACACAACCTGCAAAAATCCATTAGAGCCACTGCCCCCA
GAGATGTCAGGAACCATGCTGATGCTGGCCGTTCTGCTGCCACTGGCCTTCTTTCTGCTCCTTGCCACCGTCTTC
TCCTGCATCTGGAAGAGCCACCCTTCTCTCTGCAGGAACTGGGATCGCTGCTCAAGAGGCGTCCGAGGGGAGAG
GGACCCAATCCTGTAGCTGGAAGCTGGGAGCCTCCGAAGGCCCATCCATACTTCCCTGACTTGGTACAGCCACTG
CTACCCATTTCTGGAGATGTTTCCCCAGTATCCACTGGGCTCCCCGAGCCCCAGTTTGGAGGCAGGGGTGCCG
CAACAGCAGAGTCTCTGGACCTGACCAGGGAGCCGAGTTGGAACCCGGGGAGCAGAGCCAGGTGGCCCCACGGT
ACCAATGGCATTTCATGTCACCGGCGGGTCTATGACTATCACTGGCAACATCTACATCTACAATGGACCAGTACTG
GGGGGACCACCGGTCTGGAGACCTCCCAGCTACCCCCGAACCTCCATACCCCATTCCCGAAGAGGGGGACCCCT
GGCCCTCCCGGGCTCTCTACACCCACCAGGAAGATGGCAAGGCTTGGCACCTAGCGGAGACAGAGCACTGTGGT
GCCACACCTCTAACAGGGGGCCCAAGGAACCAATTTATACCCATGACTGACGGAGTCTGAGAAAAGGCAGAAGA
AGGGGGGCACAAGGGCACTTTCTCCCTTGAGGCTGCCCTGCCACGTGGGATTACAGGGGGCTGAGTAGGGCCC
GGGAAGCAGAGCCCTAAGGGATTAAGGCTCAGACACCTCTGAGAGCAGGTGGGCACTGGCTGGGTACGGTGCCC
TCCACAGGACTCTCCCTACTGCCTGAGCAAACCTGAGGCCTCCCGGCAGACCCACCCACCCCTGGGGCTGCTCA
GCCTCAGGCACGGACAGGGCACATGATACCAACTGCTGCCCACTACGGCACGCCGCACCGGAGCACGGCACCGAG
GGAGCCGCCACACGGTCACCTGCAAGGACGTACGGGGCCCTCTAAAGGATTTCGTGGTGCTCATCCCCAAGCTTC
AGAGACCCTTTGGGGTTCCCACTTCACGTGGACTGAGGTAGACCCTGCATGAAGATGAAATTATAGGGAGGACG
CTCCTTCCCTCCCTCCTAGAGGAGAGGAAAGGGAGTCATTAACAACCTAGGGGGTTGGGTAGGATTCTAGGTAT
GGGAAGAGTTTTTGAAGGGGAGGAAAATGGCAAGTGATTTATATTGTAACCACATGCAAATAAAAAGAATGGG
ACCTAAACTCGTGCCGCTCGTGCCGAATTCCTGCAG

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FIGURE 3477

MLLPWATSAPGLAWGPLVLGLFGLLAASQPQAVPPYASENQTCRDQEKEYYEPQHRICCSRCPPGTYVSAKCSRI
RDTVCATCAENSYNEHWNYLTICQLCRPCDPVMGLEEIAPCTSKRKTQCRCQPGMFCAAWALECTHCELLSDCPP
GTEAELKDEVGKGNHCVPCKAGHFQNTSSPSARCQPHTRCENQGLVEAAPGTAQSDTTCKNPLEPLPPEMSGTM
LMLAVLLPLAFFLLLATVFSIWKSHPSLCRKLGSLKRRPQGEGPNPVAGSWEPPKAHPYFPDLVQPLLPISGD
VSPVSTGLPAAPVLEAGVPQQQSPLDLTREPQLEPGEQSQVAHGTINGIHVTGGSMTITGNIYIYNGPVLGGPPGP
GDLPATPEPPYP IPEEGDPGPPGLSTPHQEDGKAHHLAETEHCGATPSNRGPRNQFITHD

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FIGURE 3478

CCGGCCAGCGGGCGGGCTCCCCAGCCAGGCCGCTGCACCTGT CAGGGGAACAAGCTGGAGGAGCAGGACCCTAGA
CCTCTGCAGCCCATAACCAGGTCTC **ATCG**AGGGGAACAAGCTGGAGGAGCAGGACTCTAGCCCTCCACAGTCCACT
CCAGGGCTCATGAAGGGGAACAAGCGTGAGGAGCAGGGGCTGGGCCCGAACCTGCGGCGCCCCAGCAGCCCCACG
GCGGAGGAGGAGGCCCTGATCGAGTTCCACCGCTCCTACCGAGAGCTCTTCGAGTTCTTCTGCAACAACACCACC
ATCCACGGCGCCATCCGCCTGGTGTGCTCCAGCACAACCGCATGAAGACGGCCTTCTGGGCAGTGTGTGGCTC
TGCACCTTTGGCATGATGTACTGGCAATTCCGCCTGCTTTTCGGAGAGTACTTCAGCTACCCCGTCAGCCTCAAC
ATCAACCTCAACTCGGACAAGCTCGTCTTCCCCGAGTGACCATCTGCACCCTCAATCCCTACAGGTACCCGGAA
ATTAAAGAGGAGCTGGAGGAGCTGGACCGCATCACAGAGCAGACGCTCTTTGACCTGTACAAATACAGCTCCTTC
ACCACCTCTCGTGGCCGGCTCCCGCAGCCGTCGCGACCTGCGGGGGACTCTGCCGCACCCCTTGCAGCGCCTGAGG
GTCCCGCCCCCGCTCACGGGGCCGTCGAGCCCGTAGCGTGGCCTCCAGCTTGCGGGACAACAACCCCGAGGTG
GACTGGAAGGACTGGAAGATCGGCTTCCAGCTGTGCAACCAGAACAATCGGACTGCTTCTACCAGACATACTCA
TCAGGGGTGGATGCGGTGAGGGAGTGGTACCGCTTCCACTACATCAACATCCTGTGAGGCTGCCAGAGACTCTG
CCATCCCTGGAGGAGGACAGCTGGGCAACTTCATCTTCGCCTGCCGCTTCAACCAGGTCTCCTGCAACCAGGCG
AATTACTCTCACTTCCACCACCCGATGTATGGAAGTGTCTATACTTTCAATGACAAGAACAATCCAACCTCTGG
ATGTCTTCCATGCCTGGAATCAACAACGGTCTGTCCCTGATGCTGCGCGCAGAGCAGAAATGACTTCATTCCCTG
CTGTCCACAGTGAAGTGGGGCCCGGTAATGGTGCACGGGCAGGATGAACCTGCCTTTATGGATGATGGTGGCTTT
AAGTTCGGCCTGGCGTGGAGACCTCCATCAGCATGAGGAAGGAAACCTGGACAGACTTGGGGGCGATTATGGC
GACTGCACCAAGAATGGCAGTGTGTTTCTGTTGAGAACCTTTACCTTCAAAGTACACACAGCAGGTGTGTATT
CACTCCTGCTTCCAGGAGAGCATGATCAAGGAGTGTGGCTGTGCCCTACATCTTCTATCCGCGGCCCCAGAACGTG
GAGTACTGTGACTACAGAAAGCACAGTTCCTGGGGGTACTGCTACTATAAGCTCCAGGTTGACTTCTCCTCAGAC
CACCTGGGCTGTTTACCAAGTGCCGGAAGCCATGCAGCGTGACCAGCTACCAGCTCTCTGCTGGTACTCACGA
TGGCCCTCGGTGACATCCAGGAATGGGTCTTCCAGATGCTATCGCGACAGAACAATTACACCGTCAACAACAAG
AGAAATGGAGTGGCCAAAGTCAACATCTTCTTCAAGGAGCTGAACTACAAAACCAATTCTGAGTCTCCCTCTGTC
ACGATGGTCACCTCCTGTCCAACCTGGGCAGCCAGTGGAGCCTGTGGTTTCGGCTCCTCGGTGTTGTCTGTGGTG
GAGATGGCTGAGCTCGTCTTTGACCTGCTGGTCATCATGTTCTCATGCTGCTCCGAAGGTTCCGAAGCCGATAC
TGGTCTCCAGGCCGAGGGGGCAGGGGTGCTCAGGAGGTAGCCTCCACCCTGGCATCCTCCCCCTCCTTCCCACTTC
TGCCCCACCCATGTCTCTGTCTTGTCCCAGCCAGGCCCTGCTCCCTCTCCAGCCTTGACAGCCCCCTCCCCCT
GCCTATGCCACCCTGGGCCCCCGCCATCTCCAGGGGGCTCTGCAGGGGGCAGTTCTCTCCACCTGTCTCTGGGG
GGGCCC**TGAG**AGGGGAAGGAGAGGTTTCTCACACCAAGGCAGATGCTCCTCTGGTGGGAGGGTGCTGGCCCTGGCA
AGATTGAAGGATGTGCAGGGCTTCTCTCAGAGCCGCCAAACTGCCGTTGATGTGTGGAGGGGAAGCAAGATGG
GTAAGGGCTCAGGAAGTTGCTCCAAGAACAGTAGCTGATGAAGCTGCCCAGAAGTGCCTTGGCTCCAGCCCTGTA
CCCCCTGGTACTGCCTCTGAACACTCTGGTTTCCCCACCCAACTGCGGCTAAGTCTCTTTTCCCTTGGATCAGC
CAAGCGAAAATTGGAGCTTTGACAAGGAACCTTCTAAGAAACCGCTGATAACCAGGACAAAACACAACCAAGGG
TACACGCAGGCATGCACGGGTTTCTGCCAGCGACGGCTTAAGCCAGCCCCGACTGGCCTGGCCACACTGCTC
TCCAGTAGCACAGATGTCTGCTCCTCCTTGAACCTTGGGTGGGAAACCCACCCAAAAGCCCCCTTTGTTACTT
AGGCAATTCCCCCTTCCCTGACTCCCAGGGGCTAGGGCTAGAGCAGACCCGGGTAAGTAAAGGCAGACCCAGGGCT
CCTCTAGCCTCATACCCGTGCCCTCACAGAGCCATGCCCGGCACCTCTGCCCTGTGTCTTTCATACCTCTACAT
GTCTGCTTGAGATATTTCTCAGCCTGAAAGTTTCCCCAACCATCTGCCAGAGAATCCTATGCATCCCTTAGAA
CCCTGCTCAGACACCATTACTTTTGTGAACGCTTCTGCCACATCTTGTCTTCCCCAAAATTGATCACTCCGCCTT
CTCCTGGGCTCCCGTAGCACACTATAACATCTGCTGGAGTGTGCTGTTGCACCATACTTTCTTGTACATTTGTG
TCTCCCTTCCCAACTAGACTGTAAGTGCCTTGGCGTCAAGGACTGAATCTTGCCCGTTTATGTATGCTCCATGTC
TAGCCCATCATCTGCTTGGAGCAAGTAGGCAGGAGCTCAATAAATGTTTGTGATGAAAAAAAAAAAAAAAAA
A

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FIGURE 3479

MEGNKLEEQDSSPPQSTPGLMKGNKREEQGLGPEPAAPQOPTAEELIEFHRSYRELFEFFCNNTTIHGAIRLV
CSQHNRMKTAFWAVLWLCTFGMMYWQFGLLFGEYFSYPVSLNINLNSDKLVFPVAVTICTLNPYRYPEIKEELEEL
DRITEQTLFDLYKYSSFTTLVAGSRSRDLRGTLPHPLQRLRVPPPHGARRARSVASSLRDNNPQVDWKDWKIG
FQLCNQNKSDCFYQTYSSGVDVREWYRFHYINILSRPETLPSLEEDTLGNFIFACRFNQVSCNQANYSHFHHP
MYGNCYTFNDKNNNLWMSSMPGINNGLSLMLRAEQNDFIPLLSTVTGARVMVHGQDEPAFMDDGGFNLRPGVET
SISMRKETLDRLGGDYGDCTKNGSDVPVENLYPSKYTQQVCIHSCFQESMIKECGCAYIFYPRPQNVEYCDYRKH
SSWGICYKYLQVDFSSDHLGCFTKCRKPCSVTSYQLSAGYSRWPSVTSQEWVFQMLSRQNNYTVNNKRNGVAKVN
IFFKELNYKTNSESPSVTMVTLNLGSQWLSLWFGSSVLSVVEAELVFDLLVIMFLMLLRRFRSRYWSPGRGGR
GAQEVASTLASSPPSHFCPHPMSLSLSQPGPAPSPALTAPPPAYATLGPRPSPGGSAGASSSTCPLGGP

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FIGURE 3480

CGGCCCAGTGATCTTGAACCCCAAAGGCCAGAACTGGAGCCTCAGTCCAGAGAATTCTGAGAAAATTAAAGCAGA
GAGGAGGGGAGAGATCACTGGGACCAGGCCGTGATCTCTATGCCCCGAGTCTCAACCCTCAACTGTCAACCCCAAGG
CACTTGGGACGTCTTGGACAGACCGAGTCCCGGGAAGCCCCAGCACTGCCGCTGCCACACTGCCCTGAGCCCAAA
TGGGGGAGTGAGAGGCCATAGCTGTCTGGCATGGGCCTCTCCACCGTGCCTGACCTGCTGCTGCCGCTGGTGCTC
CTGGAGCTGTTGGTGGGAATATACCCCTCAGGGGTTATTGGACTGGTCCCTCACCTAGGGGACAGGGAGAAGAGA
GATAGTGTGTGTCCCAAGGAAAATATATCCACCTCAAAATAATTGATTTGCTGTACCAAGTGCCACAAAGGA
ACCTACTTGTACAATGACTGTCCAGGCCCGGGGACAGGATACGACTGCAGGGAGTGTGAGAGCGGCTCCTTCACC
GCTTCAGAAAACCACCTCAGACACTGCCTCAGCTGCTCCAAATGCCGAAAGGAAATGGGTGAGGTGGAGATCTCT
TCTTGACAGTGGACCGGGACACCGTGTGTGGCTGCAGGAAGAACCAGTACCGGCATTATTGGAGTGAAAACCTT
TTCCAGTGCTTCAATTGCAGCCTCTGCCTCAATGGGACCGTGACCTCTCCTGCCAGGAGAAACAGAACACCGTG
TGCACCTGCCATGCAGGTTTTCTTTCTAAGAGAAAACGAGTGTGTCTCCTGTAGTAAGTAAAGAAAAGCCTGGAG
TGCACGAAGTTGTGCCTACCCAGATTGAGAATGTTAAGGGCACTGAGGACTCAGGCACACAGTGCTGTTGCC
CTGGTCATTTTCTTTGGTCTTTGCCCTTTATCCCTCCTCTTCATTGGTTTAAATGTATCGCTACCAACGGTGGAAG
TCCAAGCTCTACTCCATTGTTTGTGGGAAATCGACACCTGAAAAAGAGGGGGAGCTTGAAGGAACTACTACTAAG
CCCCTGGCCCCAAACCCAAGCTTCAGTCCCCTCCAGGCTTCAACCCCAACCTGGGCTTCAGTCCCGTGCCAGT
TCCACCTTCACCTCCAGCTCCACCTATACCCCGGTGACTGTCCCAACTTTGCGGCTCCCCGCAGAGAGGTGGCA
CCACCCTATCAGGGGGCTGACCCCATCCTTGCGACAGCCCTCGCCTCCGACCCCATCCCCAACCCCTTCAGAAG
TGGGAGGACAGCGCCCAAGCCACAGAGCCTAGACACTGATGACCCCGCAGCGTGTACGCCGTGGTGGAGAAC
GTGCCCCCGTTGCGCTGGAAGGAATTCGTGCGGCGCCTAGGGCTGAGCGACACGAGATCGATCGGCTGGAGCTG
CAGAACGGGCGCTGCCTGCGCGAGGCGCAATACAGCATGCTGGCGACCTGGAGGCGGCGCACGCCGCGGCGCGAG
GCCACGCTGGAGCTGCTGGGACGCGTGCTCCGCGACATGGACCTGCTGGGCTGCCTGGAGGACATCGAGGAGGCG
CTTTGCGGGCCCGCCGCCCTCCCGCCCGCGCCAGTCTTCTCAGATTCAGGGCTGCGCCCCTGCGGGCAGCTCTAAG
GACCGTCTTGCAGATCGCCTTCCAACCCCACTTTTTCTGGAAAGGAGGGTCTTGCAGGGGCAAGCAGGAGCT
AGCAGCCGCTACTTGGTGCTAACCCCTCGATGTACATAGCTTTTCTCAGCTGCCTGCGCGCCGCCGACAGTCAG
CGCTGTGCGCGCGGAGAGAGGTGCGCCGTGGGCTCAAGAGCCTGAGTGGGTGGTTTGCGAGGATGAGGGACGCTA
TGCCTCATGCCGTTTTTGGGTGTCTCACCAGCAAGGCTGCTCGGGGGCCCTGGTTTCGTCCCTGAGCCTTTTTT
ACAGTGATAAGCAGTTTTTTTTGTTTTGTTTTGTTTTGTTTTTAAATCAATCATGTTACACTAATAGA
AACTTGGCACTCCTGTGCCCTCTGCCTGGACAAGCACATAGCAAGCTGAACTGTCCTAAGGCAGGGGCGAGCAG
GAACAATGGGGCCTTCAGCTGGAGCTGTGGACTTTGTACATACACTAAAATTCTGAAGT

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FIGURE 3481

MGLSTVPDLLLLPLVLLELLVGIYPSGVIGLVPHLGDREKRDSVCPQGKYIHPQNN SICCTKCHKGTLYLYNDCPGP
GQDTDCRECESGSFTASENHLRHCLSCSKCRKEMGQVEISSCTVDRDTVCGCRKNQYRHYWSENLFQCFNCSLCL
NGTVHLSCQEKQNTVCTCHAGFFLRENECVSCSNCKKSLECTKLCLPQIENVKGTEDSGTTVLLPLVIFFGLCLL
SLLFIGLMYRYQRWKS KLYSIVCGKSTPEKEGELEGTTTKPLAPNPSFSPTPGFTPTLGFSPVPSSTFTSSSTYT
PGDCPNFAAPRREVAPPYQGADPILATALASDPINP LQKWEDSAHKPQSLDTDDPATLYAVVENVPPLRWKEFV
RRGLSDHEIDRLELQNGRCLREAQYSMLATWRRRTPRREATLELLGRVLRDMDLLGCLEDIEEALCGPAALPPA
PSLLR

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FIGURE 3482A

GGGGACTTCCAGAATGGCAAGAGAGTGAGCCTCTCCGTGTATCTTGGGGAATTTTTTGACATCCATTTGTTTGTC
AATGGTACCGTGACACAGGGGGACCAAAGAGTCTCCATGCCCTATGCCTCCAAAGGGCTGTATCTAGAAACTGAG
GCTGGGTACTACAAGCTGTCCGGTGAGGCCATATGGCTTTGTGGCCAGGATCGATGGCAGCGGCAACTTTCAAGTC
CTGCTGTGACAGATACTTCAACAAGACCTGCGGGCTGTGTGGCAACTTTAACATCTTTGCTGAAGATGACTTT
ATGACCCAAGAAGGGACCTTGACCTCGGACCCCTATGACTTTGCCAACTCATGGGCTCTGAGCAGTGGAGAACAG
TGGTGTGAACGGGCATCTCCTCCCAGCAGCTCATGCAACATCTCCTCTGGGGAAATGCAGAAGGGCCTGTGGGAG
CAGTGCCAGCTTCTGAAGAGCACCTCGGTGTTTGGCCGCTGCCACCCCTCTGGTGGACCCCGAGCCTTTTGTGGCC
CTGTGTGAGAAGACTTTGTGTGAGTGTGCTGGGGGGCTGGAGTGCCTCTGCCCTGCCCTCTCTGGAGTACGCCCCG
ACCTGTGCCAGGAGGGAATGGTGTGTACGGCTGGACCGACCACAGCGCTGCAGCCCAGTGTGCCCTGTCTGGT
ATGGAGTATAGGCAGTGTGTGTCCCTTGGCCAGGACCTGCCAGAGCCTGCACATCAATGAAATGTGTTCAGGAG
CGATGCGTGGATGGCTGCAGCTGCCCTGAGGGACAGCTCCTGGATGAAGGCCTCTGCGTGGAGAGCACCGAGTGT
CCCTGCGTGCATTCCGGAAGCGCTACCCTCCCGGCACCTCCCTCTCTCGAGACTGCAACACCTGCATTTGCCGA
AACAGCCAGTGGATCTGCAGCAATGAAGAATGTCCAGGGGAGTGCCTTGTACAGGTCAATCACACTTCAAGAGC
TTTGACAACAGATACTTACCTTCAGTGGGATCTGCCAGTACCTGCTGGCCCGGGATTGCCAGGACCACTCCTTC
TCCATTGTCAATTGAGACTGTCCAGTGTGCTGATGACCGCGACGCTGTGTGCACCCGCTCCGTCACCGTCCGGCTG
CCTGGCCTGCACAACAGCCTTGTGAACTGAAGCATGGGGCAGGAGTTGCCATGGATGGCCAGGACGTCCAGCTC
CCCCCTCTGAAGGTGACCTCCGCATCCAGCATAAGTACGAGTGCAGGCTCCGTCGCGCTCAGCTACGGGGAGGACCTG
CAGATGGACTGGGATGGCCGCGGGAGGCTGCTGGTGAAGCTGTCCCCGCTATGCGCGGAAGACCTGCGGCCTG
TGTGGGAATTACAATGGCAACCAGGGCGACGACTTCCTTACCCCCCTCTGGGCTGGCGGAGCCCCGGGTGGAGGAC
TTCGGGAACGCCTGGAAGCTGCACGGGGACTGCCAGGACCTGCAGAAGCAGCACAGCGATCCCTGCGCCCTCAAC
CCGCGCATGACCAGGTTCTCCGAGGAGGCGTGCAGCGCTCTGACGTCCCCCACATTGAGGGCTGCCATCGTGCC
GTCAGCCCCTGCCCTACCTGCGGAACCTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGCGAGTGCCTGTGC
GGCGCCCTGGCCAGCTATGCCGCGGCCTGCGCGGGGAGAGGCGTGCAGCTCGCGTGGCGGAGCCAGGCCGCTGT
GAGCTGAACTGCCCCGAAAGGCCAGGTGTACCTGCAGTGCAGGACCCCTGCAACCTGACCTGCCGCTCTCTCTCT
TACCCGGATGAGGAATGCAATGAGGCCTGCCTGGAGGGCTGCTTCTGCCCCCAGGGCTCTACATGGATGAGAGG
GGGGACTGCGTGCCCAAGGCCAGTGCCCTGTTACTATGACGGTGAGATCTTCCAGCCAGAAGACATCTTCTCA
GACCATCACACCATGTGCTACTGTGAGGATGGCTTATGCACTGTACCATGAGTGGAGTCCCCGGAAGCTTGCTG
CCTGACGCTGTCTCAGCAGTCCCCTGTCTCATCGCAGCAAAGGAGCCTATCCTGTGCGCCCCCATGGTCAAG
CTGGTGTGTCCGCTGACAACCTGCGGGCTGAAGGGCTCGAGTGTACCAAACGTGCCAGAACTATGACCTGGAG
TGCATGAGCATGGGCTGTGTCTCTGGCTGCCCTCTGCCCCCGGGCATGGTCCGGCATGAGAACAGATGTGTGGCC
CTGGAAGGTGTCCCTGCTTCCATCAGGGCAAGGAGTATGCCCTGGAGAAACAGTGAAGATTGGCTGCAACACT
TGTGTCTGTGAGGACCGGAAGTGAACCTGCACAGACCATGTGTGTGATGCCACGTGTCCACGATCGGCATGGCC
CACTACCTCACCTTCGACGGGCTCAAATACCTGTTCCCGGGGAGTGCCAGTACGTTCTGGTGCAGGATTACTGC
GGCAGTAACCTTGGGACCTTTCCGATCCTAGTGGGAATAAGGGATGCAGCCACCCCTCAGTGAATGCAAGAAA
CGGGTCACCATCTGGTGGAGGGAGGAGATTGAGCTGTTTGACGGGGAGGTGAATGTGAAGAGGCCCCATGAAG
GATGAGACTCACTTTGAGGTGGTGGAGTCTGGCCGGTACATCATTCTGCTGCTGGGCAAAGCCCTCTCCGTGGTC
TGGGACCGCCACCTGAGCATCTCCGTGGTCTGAAGCAGACATACCAGGAGAAAGTGTGTGGCCTGTGTGGGAAT
TTTGATGGCATCCAGAAATGACCTCACCAGCAGCAACCTCCAAGTGGAGGAAGACCCCTGTGGACTTTGGGAAC
TCCTGGAAGTGAAGTGTGCTGACAGCAGCAACCTCCAAGTGGAGGAAGACCCCTGTGGACTTTGGGAAAC
AACATCATGAAGCAGACGATGGTGGATTCTCCTGTGATGATCCTTACCAGTGACGCTTCCAGGACTGCAACAAG
CTGGTGGACCCGAGCCATATCTGGATGTCTGCATTTACGACACCTGCTCCTGTGAGTCCATTGGGGACTGCGCC
TGCTTCTGCGCACACCATTTGCTGCCTATGCCACGTTGTGTGCCAGCATGGCAAGGTGGTGAACCTGGAGGACGGCC
ACATTGTGCCCCAGAGCTGCGAGGAGAGGAATCTCCGGGAGAACGGGTATGAGTGTGAGTGGCGCTATAACAGC
TGTGCACCTGCCTGTCAAGTCACGTGTGACACCCCTGAGCCACTGGCCTGCCCTGTGCAGTGTGTGGAGGGCTGC
CATGCCCCTGCCCTCCAGGGAAAATCCTGGATGAGCTTTTGACAGCCTGCGTTGACCCCTGAAGACTGTCCAGTG
TGTGAGGTGGCTGGCCGGCGTTTTGCTCAGGAAAGAAAGTACCTTGAATCCAGTGACCCCTGAGCACTGCCAG
ATTTGCCACTGTGATGTTGTCAACCTCACCTGTGAAGCCTGCCAGGAGCCGGGAGGCTGGTGGTGCCTCCACA
GATGCCCCGGTGAGCCCCACCACTCTGTATGTGGAGGACATCTCGGAACCGCCGTTGCACGATTTCTACTGCAGC

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FIGURE 3482B

AGGCTACTGGACCTGGTCTTCTGCTGGATGGCTCCTCCAGGCTGTCCGAGGCTGAGTTTGAAGTGCTGAAGGCC
TTTGTGGTGGACATGATGGAGCGGCTGCGCATCTCCAGAAGTGGGTCCGCGTGGCCGTGGTGGAGTACCACGAC
GGCTCCACGCCTACATCGGGCTCAAGGACCGGAAGCGACCGCTCAGAGCTGCGGCGCATTGCCAGCCAGGTGAAG
TATGCGGGCAGCCAGGTGGCTCCACCAGCGAGGTCTTGAAATACACACTGTTCCAAATCTTCAGCAAGATCGAC
CGCCCTGAAGCCTCCCGCATCACCTGCTCCTGATGGCCAGCCAGGAGCCCCAACGGATGTCCCGGAACCTTTGTC
CGCTACGTCCAGGCGCTGAAGAAGAAGAAGGTCATTGTGATCCCGGTGGGCATTGGGCCCCATGCCAACCTCAAG
CAGATCCGCCTCATCGAGAAGCAGGCCCCTGAGAACAAGGCCTTCGTGCTGAGCAGTGTGGATGAGCTGGAGCAG
CAAAGGGACGAGATCTTAGCTACCTCTGTGACCTTGCCCTGAAGCCCCCTCCTCCTACTCTGCCCCCGACATG
GCACAAGTCACTGTGGGCCCGGGCTCTTGGGGGTTTCGACCCTGGGGCCCCAAGAGGAACCTCCATGGTTCTGGAT
GTGGCGTTCGTCTGGAAGGATCGGACAAAATTGGTGAAGCCGACTTCAACAGGAGCAAGGAGTTTCATGGAGGAG
GTGATTCAGCGGATGGATGTGGGCCAGGACAGCATCCACGTACCGGTGCTGCAGTACTCCTACATGGTGAAGTGTG
GAGTACCCCTTCAGCGAGGCACAGTCCAAAGGGGACATCCTGCAGCGGGTGCGAGAGATCCGCTACCAGGGCGGC
AACAGGACCAACACTGGGCTGGCCCTGCGGTACCTCTCTGACCACAGCTTCTTGGTCAGCCAGGGTGACCGGGAG
CAGGCGCCCCAACCTGGTCTACATGGTCACCGGAAATCCTGCCTCTGATGAGATCAAGAGGCTGCCTGGAGACATC
CAGGTGGTGGCCATTGGAGTGGGCCCTAATGCCAACGTGCAGGAGCTGGAGAGGATTGGCTGGCCCAATGCCCT
ATCCTCATCCAGGACTTTGAGACGCTCCCCCGAGAGGCTCCTGACCTGGTGCTGCAGAGGTGCTGCTCCGGAGAG
GGGCTGCAGATCCCCACCCTCTCCCTGCACCTGACTGCAGCCAGCCCCCTGGACGTGATCCTTCTCTGGATGGC
TCCTCCAGTTTCCAGCTTCTTATTTTATGATGAAATGAAGAGTTTCGCCAAGGCTTTCATTTCAAAAGCCAATATA
GGGCCTCGTCTCACTCAGGTGTGAGTGTGAGTATGGAAGCATCACCACCATTGACGTGCCATGGAACGTGGTC
CCGGAGAAAGCCATTGTGCTGAGCCTTGTGGACGTATGCAGCGGGAGGGAGGCCCCAGCCAAATCGGGGATGCC
TTGGGCTTTGCTGTGCGATACTTGACTTCAGAAATGCATGGTGCCAGGCCGGGAGCCTCAAAGGCGGTGGTCATC
CTGGTCACGGACGTCTCTGTGGATTGAGTGGATGCAGCAGCTGATGCCGCCAGGTCCAACAGAGTGACAGTGTTC
CCTATTGGAATTGGAGATCGCTACGATGCAGCCAGCTACGGATCTTGGCAGGCCAGCAGGCGACTCCAACGTG
GTGAAGCTCCAGCGAATCGAAGACCTCCCTACCATGGTCACCTTGGGCAATTCCTTCTCCACAACTGTGCTCT
GGATTTGTTAGGATTGTCATGGATGAGGATGGGAATGAGAAGAGGCCCCGGGGACGTCTGGACCTTGCCAGACCAG
TGCCACACCGTGACTTGCCAGCCAGATGGCCAGACCTTGCTGAAGAGTCATCGGGTCAACTGTGACCGGGGGCTG
AGGCCTTCGTGCCCTAACAGCCAGTCCCCGTGTTAAAGTGAAGAGACCTGTGGCTGCCGCTGGACCTGCCCCCTGT
GTGTGCACAGGCAGCTCCACTCGGCACATCGTGACCTTGTATGGGCAGAAATTCAGCTGACTGGCAGCTGTTCT
TATGTCTATTTCAAAACAAGGAGCAGGACCTGGAGGTGATTCTCCATAATGGTGCTGCAGCCCTGGAGCAAGG
CAGGGCTGCATGAAATCCATCGAGGTGAAGCACAGTGCCCTCTCCGTGAGCTGCACAGTGACATGGAGGTGACG
GTGAATGGGAGACTGGTCTCTGTTCTTACGTGGGTGGGAACATGGAAGTCAACGTTTATGGTGCCATCATGCA
GAGGTGAGATTCAATCACCTTGGTCACATCTTACATTCACTCCACAAAACAATGAGTTCCAAGTGCAGCTCAGC
CCCAAGACTTTTGCTTCAAAGACGTATGGTCTGTGTGGGATCTGTGATGAGAACGGAGCCAATGACTTTCATGCTG
AGGGATGGCACAGTCACCACAGACTGGAAAACACTTGTTCAGGAATGACTGTGCAGCGGCCAGGGCAGACGTGC
CAGCCCATCCTGGAGGAGCAGTGTCTTGTCCCCGACAGCTCCCACTGCCAGGTCTCTCTTACCACTGTTTGCT
GAATGCCACAAGTCTTGGCTCCAGCCACATTCTATGCCATCTGCCAGCAGGACAGTTGCCACCAGGAGCAAGTG
TGTGAGGTGATCGCCTCTTATGCCACCTCTGTGCGACCAACGGGGTCTGCGTTGACTGGAGGACACCTGATTTCT
TGTGCTATGTGATGCCACCATCTCTGGTCTACAACCACTGTGAGCATGGCTGTCCCCGGCACTGTGATGGCAAC
GTGAGCTCCTGTGGGACCATCCCTCCGAAGGCTGTTCTGCCCTCCAGATAAAGTCATGTTGGAAGGCAGCTGT
GTCCCTGAAGAGGCTGCACTCAGTGCAATGGTGAGGATGGAGTCCAGCACCAGTTCTTGAAGCCTGGGTCCCG
GACCACAGCCCTGTGAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACG
GCCAAAGCTCCACAGTGTGGCCTGTGTGAAGTAGCCCGCTCCGCCAGAATGCAGACCAGTGCTGCCCCGAGTAT
GAGTAGTGTGTGATGCCAGTGTGAGCTGTGACCTGCCCCAGTGCCTCACTGTGAACGTGGCCTCCAGCCACACTG
ACCAACCCTGGCGAGTGCAGACCAACTTACCTGCGCTGCAGGAAGGAGGAGTGCAAAAGAGTGTCCCCACCC
TCCTGCCCCCGCACCGTTTGGCCACCCTTCGGAAGACCCAGTGCTGTGATGAGTATGAGTGTGCTGCAACTGT
GTCAACTCCACAGTGAGCTGTCCCCCTGGGTACTTGGCCTCAACCGCCACCAATGACTGTGGCTGTACCACAACC
ACCTGCCTTCCCGACAAGGTGTGTGTCCACCAGCACCATCTACCCTGTGGGCCAGTTCTGGGAGGAGGGCTGC
GATGTGTGCACCTGCACCGACATGGAGGATGCCGTGATGGGCCCTCCGCGTGGCCAGTGCTCCAGAAGCCCTGT

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FIGURE 3482C

GAGGACAGCTGTCGGTCGGGCTTCACTTACGTTCTGCATGAAGGCGAGTGCTGTGGAAGGTGCCTGCCATCTGCC
TGTGAGGTGGTGACTGGCTCACCGCGGGGGGACTCCCAGTCTTCCTGGAAGAGTGTCGGCTCCCAGTGGGCCTCC
CCGGAGAACCCTGCCTCATCAATGAGTGTGTCCGAGTGAAGGAGGAGGTCTTTATACAACAAAGGAACGTCTCC
TGCCCCAGCTGGAGGTCCCTGTCTGCCCCCTCGGGCTTTCAGCTGAGCTGTAAGACCTCAGCGTGCTGCCCAAGC
TGTGCTGTGAGCGCATGGAGGCCGTCATGCTCAATGGCACTGTCATTGGGCCCGGGAAGACTGTGATGATCGAT
GTGTGCACGACCTGCCGCTGCATGGTGCAGGTGGGGGTCATCTCTGGATTCAAGCTGGAGTGCAGGAAGACCACC
TGCAACCCTGCCCTGGGTTACAAGGAAGAAAATAACACAGGTGAATGTTGTGGGAGATGTTTGCTACGGCT
TGCACCATTCAGCTAAGAGGAGGACAGATCATGACACTGAAGCGTGATGAGACGCTCCAGGATGGCTGTGATACT
CACTTCTGCAAGGTCAATGAGAGAGGAGAGTACTTCTGGGAGAAGAGGGTCACAGGCTGCCACCCCTTTGATGAA
CACAAGTGTCTGGCTGAGGGAGGTAAAATTATGAAAATTCCAGGCACCTGCTGTGACACATGTGAGGAGCCTGAG
TGCAACGACATCACTGCCAGGCTGCAGTATGTCAAGGTGGGAAGCTGTAAGTCTGAAGTAGAGGTGGATATCCAC
TACTGCCAGGGCAAATGTGCCAGCAAAGCCATGTACTCCATTGACATCAACGATGTGCAGGACCAGTGCTCCTGC
TGCTCTCCGACACGGACGGAGCCCATGCAGGTGGCCCTGCCTGCACCAATGGCTCTGTTGTGTACCATGAGGTT
CTCAATGCCATGGAGTGCAAATGCTCCCCAGGAAGTGCAGCAAGTGAGGCTGCTGCAGCTGCATGGGTGCCTGC
TGCTGCCTGCCTTGGCCTGATGGCCAGGCCAGAGTGCTGCCAGTCCTCTGCATGTTCTGCTCTTGTGCCCTTCTG
AGCCACAATAAAGGCTGAGCTCTTATCTTGC

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FIGURE 3483A

TCAGTGGCGTTTGCCCTGATTCCCGGGGCTGGCTTTACGCGTAGCAATTCTGCCGGCGAAGAAGGTGAGCGCAG
TGCTGTGTGGCAGCAGAGGTCTTAGGACGAGGAACAGCGGGACGAGGAAGGGCAGACTGGTGAAATCGCAAACCT
GGGCGTCTGTTCCGGCACCGGACCCCTGTTTGCAAAGGTCCATGCTAATGAAACACAGAAGGTTGGTGCCATCC
ATTTTCCCTTTCCCTTCACACCCCTATTCCATCCAGGAAGACTTCATGGCAGAGCTGTACCGGGTTTTGGAGGCTG
GCAAGATTGGGATATTTGAGAGTCCAACCTGGCACTGGGAAGTCCTTAAGTCTTATTTGTGGGGCCCTCTCCTGGC
TCCGTGACTTTGAACAGAAGAAGCGTGAAGAAGAGGCACGACTCCTTGAAACTGGAAGTGGCCCCCTTACATGATG
AGAAAGATGAATCCCTGTGTCTGTCTTCTCCTGCGAAGGGGCTGCAGGCACCCCGAGGCCTGCTGGAGAACC GG
CCTGGGTTACTCAGTTTGTGCAGAAGAAAGAAGAGAGGGACCTGGTGGACCGACTGAAGGTGGAGCAGGCCAGGA
GGAAGCAGCGAGAAGAAGCGCTGCAGCAGCTGCAGCACAGGGTGCAGCTCAAGTATGCAGCCAAGCGCCTGAGGC
AGGAAGAAGAAGAAACAGAGAATCTCCTCCGCTCAGCAGGGAGATGCTAGAGACAGGCCCGGAGGCCGAGCGGC
TGGAGCAGCTGGAGTCTGGGGAGGAGGAGCTGGTCTCGCCGAATACGAGAGTGATGAGGAGAAAAAGGTGGCGA
GCAGAGTGGATGAGGATGAGGATGACCTGGAGGAAGAACACATAACTAAGATTTATCACTGTAGTCGGACACACT
CCCAGCTGGCCAGTTTGTGCATGAGGTGAAGAAGAGCCCCCTTTGGCAAGGATGTTTCGGCTGGTCTCCCTCGGCT
CCCGGCAGAACCCTTTGTGTAATGAAGACGTGAGAAGCCTAGGTCTGTGTGCAGCTTATCAACGACCGCTGCGTGG
ACATGCAGAGAAGCAGGCACGAGAAGAAGAAAGGAGCTGAGGAGGAGAAGCCAAAGAGGAGGAGGCAGGAGAAGC
AGGCAGCCTGCCCTTCTACAACCACGAGCAGATGGGCCTTCTCCGGGATGAGGCCCTGGCAGAGGTGAAGGACA
TGGAGCAGCTGCTGGCCCTTGGGAAGGAGGCCCGGGCCTGTCCCTATTACAGGAGCCGCTTGGCATCCCTGCAG
CCCAGCTGGTGGTGTGCTGCCCTATCAGATGCTGCTGCATGCGGCCACTCGGCAGGCCGCGCCGCATCCGGCTGCAGG
ACCAGGTGGTGATCATCGACGAGGCGCACACCTGATCGACACCATCACGGGCATGCACAGCGTGGAGGTACGCG
GCTCCCAGCTCTGCCAGGCCCATTCCCAGCTGCTGCAGTACATGGAGCGATACGGGAAGCGTTTGAAGGCCAAGA
ACCTGATGTACCTGAAGCAGATCCTGTATTTGCTGGAGAAATTCGTGGCTGTGCTAGGGGGGAACATTAAGCAAA
ATCCCAATACACAGAGTCTGTACACAGACAGGGACGGAGCTGAAGACCATCAACGACTTTCTCTTCCAGAGCCAGA
TCGACAACATCAACCTGTTCAAGGTGCAGCGATACTGTGAGAAGAGCATGATCAGCAGAAAGCTCTTTGGCTTCA
CTGAACGGTACGGAGCAGTGTTCTCATCCCGGGAGCAGCCCCAACTGGCTGGGTTTACGAATTCCTGCAGAGCC
TGCAGCCCAGGACGACTGAAGCTCTTGCAGCCCCCTGCAGACGAGAGTCAGGCCAGCGTCCCGCAACCAGCTTCCC
CACTAATGCACATCGAAGGCTTCTTGGCAGCTCTCACTACGGCCAACCAGGACGGCAGGGTCATCCTGAGCCGCC
AAGGCAGCCTCAGTGAGAGCACCTGAAGTTTTTGCTCCTGAATCCAGCTGTGCACTTTGCCCAAGTGGTGAAGG
AATGCCGGGACAGTGGTCATTGCGGGGGGACCATGCAGCCGGTGTCTGACTTCCGGCAGCAGCTGCTGGCCTGTG
CTGGGGTGAAGCTGAGCGCGTGGTGGAGTTTTCTGTGGTTCAGTGATCCCTCCAGACAACATCTGCCCTTGT
CATCTGCAGCGGGATCTCCAACCAGCCGTGGAATTCACCTTCCAGAAAAGAGACCTGCCTCAGATGATATTCCA
GGAACCTAAGAGCGCACACCAGGTGGAGCAGGTGCTGCTGGCGTATTCAGGTGCATCCAGGCCTGTGGCCAGGA
GAGAGGCCAGGTGACAGAGGCCCTGCTCCTCTCTGTGGTGGAGGAAAGATGAGTGAAGGGATCAACTTCTCTGA
CAACCTAGGCCGGTGTGTGGTGTGGTGGGCATGCCCTTCCCCAACATCAGGTCTGCAGAGCTGCAGGAGAAGAT
GGCCTACTTGGATCAAACCTTCCCAGAGCCCCCGGCCAGGCACCCCCAGGGAAGGCTCTGGTGGAGAACCCTGTG
CATGAAGGCCGTCAACCAGTCCATAGGCAGGGCCATCAGGCACCAGAAAGGATTTTGCCAGCATAGTGCTCCTGGA
CCAGCGATACGCCCGGGCCCCCTGTCTGGCCAAGCTGCCGGCCTGGATCCGAGCCAGTGTGGAGGTCAAAGCTAC
CTTTGGCCCCGCCATTGCTGCTGTGCAGAAGTTTACCGGGAGAAGTCGGCCTCTTCTGATGGGCAACCACACC
ACCGCCCCGGCGCGTGCCCTTCCCTTTGCTGCTGCTGCTGAGACAGTGTTTGTGCTGGGCGTGGTCTGCAGGGAT
CCTGTTACAAAGGTGAACCCAGGAGGAGAGTGTGGAGTCCAGAGCGCTGCCGGGACCCAGGCACAGGCGTTAGC
TCCCGTAGGAGAAAAATGCGGGAATCCTGAATGAACAGTGGGTCTGGCTGTCTTGGGCGTTCAGGGCAGCTC
CCCTCCTGGAATAGAATCTTTCTTTCCATCCTGCATGGCTGAGAGCCAGGCTTCTGCTTGGAGTCCGAGGAGG
CTGTGGCAGCAGTGGCATCCACTGTGGCATCTCCGTCTGCCCCACCTTAAGAGGCGAGATGGAGCAGGTCCATCT
GCCTCTGCCCTTTCTAGCCAAGGTTATAGCTGCCCTGGACTGCTCACTCTCTGGTCTCAATTTAAATGATCCCG
TGGCCACAGGGCTCCTGCCAGGGGCTTGTACCTTCCCCCTCCTCTCTGAGTCACTTCCAGTAGAAGGCC
CTGCTCTCTATCTGCCCCACAGCCCTGCCTGGATTGTATCCTTGGCTTCGTGCCAGTTCTCTCAAGTCTATGG
CACCTCCCTCCCTCTCAACCACTTGAACAACTCCAAGACACCTTCTACCCCGACACCAGCAATTATGCCAAGGG
CCATTAGGCTCTCAACATGACTATAGAGACCCCGTATCATCATGGAGACCTTTGTTTCTGTGGGAAAAATAACCT
CCCACCTGCAACAGCTGCCCTGCTGACTGCGCCTGTCTTCTCCCTCTGACCCAGAGAAAGGGGCCGTGGTCAG

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FIGURE 3483B

CTGGGATCTTCTGCCACCATCAGGGACAAACCGGGGGCAGGAGGAAAGTCACTGATGCCAGCTGTTTGCAICCT
GCACAGCTACAGGTCCTTAATTAAAAAGTGTACTGTTGGTT

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FIGURE 3484

MANETQKVGAIHFPFPFTPYSIQEDFMAELYRVLEAGKIGIFESPTGTGKSLSLICGALSWLRDFEQKKREEEAR
LLETGTGPLHDEKDESLCLSSSCEGAAGTPRPAGEPAWVTQFVQKKEERDLVDRLKVEQARRKQREERLQQLQHR
VQLKYAAKRLRQEEETENLLRLSREMLETGPEAERLEQLES GEEELVLA EYESDEEKKVASRVEDEDDLEEEH
ITKIYHCSRTHSQLAQFVHEVKKSPFGKDVRLVSLGSRQNL CVNEDVRSLSG SVQLINDRCVDMQSRHEKKKGAE
EEKPKRRRQEKQAACPFYNHEQMGLLRDEALAEVKDMEQLLALGKEARACPYYRSRLAIPAAQLVVLPYQMLLHA
ATRQAAGIRLQDQVVIIDEAHNLIDTITGMHSVEVSGSQLCQAHSQLQYMERYGKRLKAKNLMY LKQ ILYLLEK
FVAVLGGNIKQNPNTQSLSQGTGTELKTINDFLFQSQIDNINLFKVQRYCEKSMISRKLFGFTERYGAVFSSREQP
KLAGFQQFLQSLQPRTEALAAPADESQASVPQASPLMHIEGFLAALT TANQDGRVILSRQGS LSESTLK FLLL
NPAVHFAQVVKECRAVVIAGGTMQPVSDFRQQLACAGVEAERVVEFSCGHVIPPDNICPLSSAAGSPTS RWN SP
SRKETCLR

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FIGURE 3485A

TACAATACAGTCTGTTCTCCTCCAGCTCCTTCTTTCTGCAACATGGGGAAGAACAACCTCCTTCATCCAAGTCTG
GTTCTTCTCCTCTTGGTCTCCTGCCCCACAGACGCCTCAGTCTCTGGAAAACCGCAGTATATGTTTCTGGTCCCC
TCCCTGCTCCACACTGAGACCACTGAGAAGGGCTGTGTCTTCTGAGCTACCTGAATGAGACAGTGAAGT
GCTTCTTGGAGTCTGTGAGGGGAAACAGGAGCCTCTTCACTGACCTGGAGGCGGAGAATGACGTACTCCACTGT
GTCGCCTTCGCTGTCCCAAAGTCTTCATCCAATGAGGAGGTAATGTTCTCACTGTCCAAGTGAAAGGACCAACC
CAAGAATTTAAGAAGCGGACCACAGTGATGGTTAAGAACGAGGACAGTCTGGTCTTTGTCCAGACAGACAAATCA
ATCTACAAACCAGGGCAGACAGTGAAATTTCTGTGTCTCCATGGATGAAAACCTTTACCCCCCTGAATGAGTTG
ATTCCACTAGTATACATTCAGGATCCCAAAGGAAATCGCATCGACAATGGCAGAGTTTCCAGTTAGAGGGTGGC
CTCAAGCAATTTTCTTTTCCCTCTCATCAGAGCCCTTCCAGGGCTCCTACAAGGTGGTGGTACAGAAGAAATCA
GGTGAAGGACAGAGACCCCTTTTACCGTGGAGGAATTTGTTCTTCCCAAGTTTGAAGTACAAGTAACAGTGCCA
AAGATAATCACCATCTTGAAGAAGAGATGAATGTATCAGTGTGTGGCCTATACACATATGGGAAGCCTGTCCCT
GGACATGTGACTGTGAGCATTTCAGAAAGTATAGTGACGCTTCCGACTGCCACGGTGAAGATTCACAGGCTTTC
TGTGAGAAATTCAGTGGACAGCTAAACAGCCATGGCTGCTTCTATCAGCAAGTAAAAACCAAGGTCTTCCAGCTG
AAGAGGAAGGAGTATGAAATGAACTTCACACTGAGGCCAGATCCAAGAAGAAGGAACAGTGGTGGAAATTGACT
GGAAGGCAGTCCAGTGAAATCACAAGAACCATAACCAAACCTCTCATTGTGAAAGTGGACTCACACTTTTCGACAG
GGAATTCCTTCTTTGGGCAGGTGCGCCTAGTAGATGGGAAAGCGTCCCTATACCAAATAAAGTCATATTCATC
AGAGGAAATGAAGCAAACCTATTACTCCAATGCTACCACGGATGAGCATGGCCTTGTACAGTTCTCTATCAACACC
ACCAATGTTATGGGTACCTCTCTTACTGTTAGGGTCAATTACAAGGATCGTAGTCCCTGTTACGGCTACCAAGTGG
GTGTCAGAAGAACACGAAGAGGCACATCACACTGCTTATCTTGTGTTCTCCCCAAGCAAGAGCTTTGTCCACCTT
GAGCCCATGTCTCATGAACCTACCCTGTGGCCATACTCAGACAGTCCAGGCACATTATATTCTGAATGGAGGCACC
CTGCTGGGGCTGAAGAAGCTCTCCTTCTATTATCTGATAATGGCAAAGGGAGGCATTGTCCGAACCTGGGACTCAT
GGACTGCTTGTGAAGCAGGAAGACATGAAGGGCCATTTTCCATCTCAATCCCTGTGAAGTCAGACATTGCTCCT
GTCGCTCGGTTGCTCATCTATGCTGTTTTACCTACCGGGGACGTGATTGGGGATTCTGCAAAATATGATGTTGAA
AATTGCTCTGGCCAACAAGGTGGATTTGAGCTTCAGCCCATCACAAAGTCTCCCAGCCTCACACGCCCACCTGCGA
GTCACAGCGGCTCCTCAGTCCGTCTGCGCCCTCCGTGCTGTGGACCAAAGCGTGTGCTCATGAAGCCTGATGCT
GAGCTCTCGGCGTCTCGGTTTACAACCTGCTACCAGAAAAGGACCTCACTGGCTTCCCTGGGCCTTTGAATGAC
CAGGACAATGAAGACTGCATCAATCGTCATAATGTCTATATTAATGGAATCACATATACTCCAGTATCAAGTACA
AATGAAAAGGATATGTACAGCTTCTTAGAGGACATGGGCTTAAAGGCATTACCAACTCAAAGATTGCTAAACCC
AAAATGTGTCCACAGCTTCAACAGTATGAAATGCATGGACCTGAAGGTCTACGTGTAGGTTTTATGAGTCAGAT
GTAATGGGAAGAGGCCATGCACGCCTGGTGCATGTTGAAGAGCCTCACACGGAGACCGTACGAAAGTACTTCCCT
GAGACATGGATCTGGGATTTGGTGGTGGTAAACTCAGCAGGTGTGGCTGAGGTAGGAGTAACAGTCCCTGACACC
ATCACCGAGTGAAGGCAGGGGCCCTTCTGCCTGTCTGAAGATGCTGGACTTGGTATCTCTTCCACTGCCTCTCTC
CGAGCCTTCCAGCCCTTCTTTGTGGAGCTCACAATGCCTTACTCTGTGATTCTGTGGAGAGGCCTTCACACTCAAG
GCCACGGTCTTAACTACCTTCCCAAATGCATCCGGTCACTGTGCAGCTGGAAGCCTCTCCGCTTCTCTAGCT
GTCCAGTGGAGAAGGAACAAGCGCCTCACTGCATCTGTGCAAACGGGCGGCAAACCTGTGCTCTGGGCAGTAACC
CCAAAGTCATTAGGAAATGTGAATTTCACTGTGAGCGCAGAGGCACTAGAGTCTCAAGAGCTGTGTGGGACTGAG
GTGCCTTCAGTTCTGTAACACGGAAGGAAGACACAGTCATCAAGCCTCTGTTGGTTGAACCTGAAGGACTAGAG
AAGGAAACAACATTCAACTCCCTACTTTGTCCATCAGGTGGTGAGGTTTCTGAAGAATTATCCCTGAAACTGCCA
CCAAATGTGGTAGAAGAATCTGCCCAGCTTCTGTCTCAGTTTGGGAGACATATTAGGCTCTGCCATGCAAAAC
ACACAAAATCTTCTCCAGATGCCCTATGGCTGTGGAGAGCAGAATATGGTCCTCTTTGCTCCTAACATCTATGTA
CTGGATTATCTAAATGAAACACAGCAGCTTACTCCAGAGATCAAGTCCAAGGCCATTGGCTATCTCAACACTGGT
TACCAGAGACAGTTGAACTACAAACACTATGATGGCTCTACAGCACCTTTGGGGAGCGATATGGCAGGAACCAG
GGCAACACCTGGCTCACAGCCTTTGTTCTGAAGACTTTTGCCCAAGCTCGAGCCTACATCTTCATCGATGAAGCA
CACATTACCCAAGCCCTCATATGGCTCTCCAGAGGCAGAAGGACAATGGCTGTTTCAGGAGCTCTGGGCTCATG
CTCAACAATGCCATAAAGGGAGGAGTAGAAGATGAAGTGACCCTCTCCGCTATATACCATCGCCCTTCTGGAG
ATTCTCTCACAGTCACTCACCTGTTGTCCGCAATGCCCTGTTTGCCTGGAGTCAGCCTGGAAGACAGCACAA
GAAGGGGACCATGGCAGCCATGTATATACCAAAGCACTGCTGGCCTATGCTTTTGCCTGGCAGGTAAACCAGGAC
AAGAGGAAGGAAGTACTCAAGTCACTTAATGAGGAAGCTGTGAAGAAAGACAACCTCTGTCCATTGGGAGCGCCCT

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FIGURE 3485B

CAGAAACCCAAGGCACCAAGTGGGGCATTTTTACGAACCCCAGGCTCCCTCTGCTGAGGTGGAGATGACATCCTAT
GTGCTCCTCGCTTATCTCACGGCCAGCCAGCCCCAACCTCGGAGGACCTGACCTCTGCAACCAACATCGTGAAG
TGGATCACGAAGCAGCAGAATGCCAGGGCGGTTTCTCCTCCACCCAGGACACAGTGGTGGCTCTCCATGCTCTG
TCCAAATATGGAGCAGCCACATTTACCAGGACTGGGAAGGCTGCACAGGTGACTATCCAGTCTTCAGGGACATTT
TCCAGCAAATTCCAAGTGGACAACAACAACCGCCTGTTACTGCAGCAGGTCTCATTGCCAGAGCTGCCTGGGGAA
TACAGCATGAAAGTGACAGGAGAAGGATGTGTCTACCTCCAGACATCCTTGAAATACAATATTCTCCAGAAAAG
GAAGAGTTCCCCTTTGCTTTAGGAGTGCAGACTCTGCCTCAAACCTTGATGAACCCAAAGCCCACACCAGCTTC
CAAATCTCCCTAAGTGTCAGTTACACAGGGAGCCGCTCTGCCTCCAACATGGCGATCGTTGATGTGAAGATGGTC
TCTGGCTTCATTCCCCCTGAAGCCAACAGTGAAAATGCTTGAAAGATCTAACCATGTGAGCCGGACAGAAGTCAGC
AGCAACCATGTCTTGATTTACCTTGATAAGGTGTCAAATCAGACACTGAGCTTGTTCTTCACGGTTCTGCAAGAT
GTCCAGTAAGAGATCTGAAACCAGCCATAGTGAAAGTCTATGATTACTACGAGACGGATGAGTTTGCAATTGCT
GAGTACAATGCTCCTTGACAGCAAAGATCTTGGAATGCTTGAAAGACCACAAGGCTGAAAAGTGCTTTGCTGGAGT
CCTGTTCTCAGAGCTCCACAGAAGACACGTGTTTTTGTATCTTTAAAGACTTGATGAATAAACACTTTTTCTGGT
C

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FIGURE 3486

CATCAGCCCAGCCTGCAAGGAGGCGCCACCGGACCTGCACACTCAGGAGCAGACTCAGCTAGATTGGAAGAGAGG
ATGGGAAGACAATGGATGACCTACCTGTGGAGAGAACTACCCATTCCAGAACCTCCTCTCTGCTGAAAGCTGAA
CACTCAATGGGAAGACCTGTTTGCAGAGAGGAGCCAGCCACTCCAGGGTCTCCGTTCTGCTAGAAGCTGAACACT
CGTTGGGACACCCCTTGCTGTGGAAAGGACATCCTTACTGTGGAAATGAGCTACTAACTGCAGGAGCTGAGGAGCT
GCACAGCAAGGTTAAAGAGCTGTAACACAAACAGGGCTGCAACATGCCCCCTTGCTCCCCACAGGGAGAGAAGAG
CTCTGGCCCTCGGAGAAGCCCAGACCTGGGAGCTCCTTGAGCCCGGGCTGTGACTCCCTCTTTGGGGCCCTGGTT
GGCGTCACTGCAATTCGCCAGTGCCACTGTTGGAAGCTGCTTGTGATCGCCTGGTCCAGGGGGAAGCTGTTTGT
GTGTGCCTGGTCCAGCCACCTCATGGAGAGCCTGTGTGTCGACCTGGAGCTGCCAACCTGGGCAGCAGCTTGTG
TGTGTGACTGCACAGTGGCCACGCTTGCTCACACACCCCTAGCACACCCCTCTGCTCCACCCGTCTCAATCTCCC
TTGGATCCGGGATCCAGGTTGGTAGCAAGTGCAGTGGGCAGAAGCAGCCCAGTGGGCCCAGAGCAAACTCAGG
CAAAGGTGCCACTAGACTGGCCAGGAAAGCGACACCCCTAAAGATCCCATAATGCTGATATGTTAATTCTATTCTA
TAAGCACCACACAGAAGTGATAGCTTTTATTTCTTATTTTGTCTAGCCTGGAGACAGAGCTAAGGATTCTTGAA
CTGCAAAGTCTTTTCCAGTTCTTAGTTTATACAATCCATACTCACCTTCTGCCTAACTAAGCATTGTCAATTTTG
TGCCAAATGAAGAGTAGGACTCCTACGATTGTCTCAGACTCTCTTGGCTCAATCCTCCTGCTTTAACCTTTCTCT
ACTTCAAAACTCCTGAAGTTTGTCTCCCTTCTATAGAATGGAAATATATGTCGAATACTTACTGCAAAGAA
AATTATATATTTTAAAAATAGACTAAAGAGATGTTGTGAGACATCAGACATCAATCAGATGTTGTGAGAACTGAT
TTCTGCATCAGAATATCTCCTTGACTTTACAGCTATCCTTTAATCCTGGCTCAAAGTTCAGAAGAAAGATGATC
CAATATAATATCTCTATTTGGACTTTGAGTCATACACATTCTTCTTCTGAGAAAACGTGCTTCTGCATGAATCC
TCCCTTCATTATTTTTCAGCTCATCTATTATTGAATCTGAAACCCCAAGTTAACTGACTGATCACTCTCATCAGTG
GCAGATTTTGGTGTAACATAGGACACATCACTCCCAATTCAGGTCAAGTCCCAATTATCTTGCCTCTCAATATGA
CATGTTCAATGTTGTATTTTATTCTACTTCATTTTAAATGTAAAAAGTCTTTTCTGGTGAAGTCAGTCTTTTATTT
TCTCATAAAAATTACCCCTTTGGGTTTTTCATAGGGTATTCCCATAACCAAACACACTTTACACTTTTCTAGTAC
ATAACCCAATACTTTCTTCTTTCCCCACAGTCCTTACATGAAGCCTACTCAGACCGACATCACTGTATCATTTTTT
TTGTATTCTGAAGTCCTTCAGCACTTGATTCTTTAAGTTAATCTTGGTATTCTATTGGGAATCATATGGAAAT
GTACAATGATATTTATTGAATGAACAGGAAACAGGGAAAGACATTGACCAGAAAAAGTGTTTATTTCATCAAGTCT
TTAAAGATACAAAAACAGTGTCTTCTGTGGAGCTCTGAGAACAGGACTCCAGCAAAGCACTTTTCAGCCTTGTG
GTCTTCAAGCATTTCCAAGATCTGTGACATTGGAAAGAAAAAAATTAAGACAGATTTGGGTCTCCATGAGCAGA
GAGTATTCTTTCCCTTAGTTCTGGGTAGCATAGTGCCCAAGGAAACCTAATCAGTACAGTGGGAAACCAATCTA
TTCCAAATCATTACCCATAAGCAATCCTATGGACTCTCTGAGGTTTGACAGAGTCAGCGGCCCTCTCCAATAAAT
GTGTTTTTCTAT

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FIGURE 3487

MRLVQGEAVCCVPGPATSWRACAGTWSCPTWAAACVCDCTVATLAHTPLAHP SAPPVSI SLGSGIQVGSKEWAE
AAQWAQSKTQAKVPLDWPGKRHPKDPIMLIC

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FIGURE 3488

ACTCGAACCCCTACCCGGGAGCGGTCAGGCGCGTGACCCCGCGTGACCGGGGTGCGCGAGCCGAGAGGCCCTGGAA
GCGGGACTCTGGGACCCCAATTGAAAGAAAGGCAACCAGAAAAGGCGAAACGACAACCTCGATAGTGATTGGAGCT
GATGGAACGAGGGCGGAGCTAAAGTCCCAGAATACTGGCCAATCAGAGTTTAAGATTATCAGGGAGCCCCGGGAAG
GGGAAAGGGGCGAAATGGTTCTATGGTCACATGCCGCGGGGTCTGGTGGGAGGAGCGGTTGCCACGCGGCTCTT
GGCGCTTCCTGTTTCCGGTTCAGAGTGGGGCACAGCGAGGCGCTAGGGGGAACGCTGGCCTCTGAAACTAGCT
CTGGGACCGGGGTCTGCGGCCGGCCCCCTAGCTGGCCCCGTCTCCCATCCCCAGAAGGGTATTCACTGGGGATTCT
GAGCTTTGGCTACTCCAGTTTCCCACGACACGTGAGTGTGAGGGGCGTGGAGGAGGAGGCGGGCTGGGTTGCGCT
CACACTTAAGCGTCTGTGACAGGAGCCGGAATCGCATTCTCCCTTGACCATGGTTCTAGCCAAAGATCTGGCTGA
GGAGCCCTAAGGGTAGAATGGAGGCGGAGGCATGAGAGCGGAGAGTCACGGAGTTCCGAAAGGTGTGAGGGAGAA
AGGACTTCCAAGACCAGAGAGGGGATTTACGATATTTAGAAAGCAGGGAAAGGAAAATACCCCAAGTATGGAGTC
CGTTGGAGGTGTTGGTGGATTTATTTGTAGGAGGAATTTTGGCCTGCATCACGGTGGGAGGTCAAGTGGCATCAT
TTGGAGAGGGTATGGCTACAAGCGCTTGGAAAGTCGGGACACTAGACAGAGCGAGAATTTCTGGCACCCCTGGGAG
AGCTTTGAGGGGGATGCGACTGTGGTGTGGATAAGAATGGCTGATGGACGGATTATCTTGTGTTTCTCGTTGTGG
GGAGCTTCCGCTCTTGGGACATAGCCGCTACTTGTCTGAGGCTCCTTCTCTTGTAGTTCTTTTCAGCATTAGGCC
TTTTAGCCAATTGAGGCTGCTTTTCTAAACATGTAGGCTGCTGGAGAAAAAGGGATAAGGACTGCTACATCAGAA
AGGAGCCAGCGGGAAGACAGTAGAAATTCACCTGGTAAATGGCCATGGCTGTCTTAACAGATGGGGAAAGTGAGTG
CTACAGAGGCCAGTGGTGTAAAGCTGCTTCCCAGTTGCTGGCTTAGTCATTGGCCACCCTAATAAAGGATAATTT
TTAGCATTGCCAAATAAAATAGATCTGTCTGTAGAGAATAAGAAAAGTGAAGATTTTTCAAGATCATAAAATCC
TGCTCCTTATTTCCAAAGTATATAGACAACTCTTGTACCTTGAGAATCTAATTGTAGCATATTAAGGGGGCT
ACTGGGCCCTTCCATTTTATTCTCTTCTGATTGTTGCACCCCTATGTTTATAAGTTTTCCAGCAGTTATCTTTA
TGCCACGAATCGTCTAAATTGCCCCAGTAACCTCACACACATTTAATATCTGTGTAATGTACAGCAAGTAATTTA
ACAAGTAATTCTGTAAAGCATCAGTTTTCTCATCTGTGAAGTATGAAAAATTATACCTATTTTCTGGGTGTGAA
GATGAATGAACATAATCTAGGGAAAACATTTAGCGCATATGCCACTGAATTAAAGAGAAGCAGCTTAAATTTAAA
GACAAGCCTTAAGCAGGAAAGAAGAATACAGTATAAATTTATATCCTAACTTTTTGAATAATAAGCAAATGAAA
GATAGTTCAACTCAGCTAATGGCTGAGGTGTTTAACTTTTCATCCCTTCCTAATTTTGTGAGATTCTTGTCTTA
ATTTAGGAAAAGAAATCAACTGTCAGTTTTTAATTAGGTCTGAGAGACTGGAAAGGAAAATGGCAGGCTAAGTC
AGTCTAGAAGAAGGAGTCTCCTATTTCTTTTTAGTGAGTCAGCTGGTCAAGTTGTGTGTTGAGCAGTGGGTTAAC
TTAGGGAAGGTGGGAGTTGGAGGTCTGAGTTCTTTATTTACCTCCTATTCACTCAACTGTGTGAGGAATCACTT
CCCCTTCACTTCTTAGT

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FIGURE 3489

TTCCGGTTCCAGAGTGGGGCACAGCGAGGCGCTAGGGGGAACGCTGGCCTCTGAACTAGCTCTGGGACCGGGG
TCTGCGGCCGGCCCCCTAGCTGGCCCCGTCTCCCATCCCCAGAAGGGTATTCACTGGGGATTCTGAGCTTTGGCTA
CTCCAGTTTTCCACGACACGATGTTCCCTTTCTACAGCTGCTGGAGGACTGGACTGCTACTACTCTCTGGCTG
TGGCAGTGAGAGAATCCTGGCAGACAGAAGAAAAAAGCTTGGGACTTGGTAGGAGAAAAGGGTAAAGAGTCAGAGA
AAGAGTTGGCTCTAGTGAAGAGGCTGAAACCACTGTTTTAATAAAAGCTTTGAGAGCACTGTGGGCCAGGGTTTCAG
ACACATACATCTACATCTTCAGGGTGTGCCGGGAAGCTGGCAACCACACTTCTGGGGCAGGCCCTGGTGCAATCA
ACAAAAGTAATGGGAAGGAGACAGTGGTAGGGAGACTCAACGAGACTCACATCTTCAACGGAAGTAATTGGATCA
TGCTGATCTATAAAGGGGGTGATGAATATGACAACCACTGTGGCAAGGAGCAGCGTCGTGCAGTGGTGATGATCT
CCTGCAATCGACACACCCTAGCGGACAATTTTAACCCCTGTGTCTGAGGAGCGTGGCAAAGTCCAAGATTGTTTTCT
ACCTCTTTGAGATGGATAGCAGCCTGGCCTGTTACCCAGAGATCTCCACCTCAGTGTGGGTTCCATCTTACTTG
TCACGTTTGCATCACTGGTTGCTGTTTTAIGTTGTTGGGGGGTTCCTATACCAGCGACTGGTAGTGGGAGCCAAAG
GAATGGAGCAGTTTTCCCACTTAGCCTTCTGGCAGGATCTTGGCAACCTGGTAGCAGATGGCTGTGACTTTGTCT
GCCGTTCTAAACCTCGAAATGTGCCTGCAGCATATCGTGGTGTGGGGGATGACCAGCTGGGGGAGGAGTCAGAAG
AAAGGGATGACCATTTATTACCAATGTAGATTGCACTTTATATGTCCAGCCTCTTCTCAGTCCCCCAAACAAA
GCTACACAGCCAGATTTCTCAAGCAGTCTCAACTCCAGTCCCTCATCTCACCCTTACTATTGCTCTTGCTTTCCA
GTTTGCTTTTGATTTGCATCTTCTCACTAGTAAAGTGCCTTCCCTTTGTCTTATTTTCTGTTTTTCTCTAG
AGAGGTACAGTTGTAAGTCAGAGTTAATATAATAGGGCCTGTGAAAAACAGAGGCTTTTGCAATTGTCTCTTGACAT
CAGAAGTTACAATAGGCATATGGGCAAAATGGTGTAGCAGGCTCACTGGCCGTTTGTTTTTTAAACACATTTTCA
CAAGTTTTTGAGACACTGGATTTCTTTAATTAAAAAAGGATGCCAAGAAACATTATTTATACAGGGTTGATTGC
TTTCATGTTGTTATTCTGTACCCTATAGTAGCCTCCATGAGAATCTGGTATTTCTTGCTGCTTGGAACACTTTG
CAGTGATTACTTGGTTGCAGTCCAAGTACTCTCGTTTAGTCTGAGCCTGGAGATGTTCTAGACTTGCTTCTCCA
CCTCTGAGATTAGGACAGGAAAAATGTGAAATTTCCCAATTACAGGATTATACGGTACCATCACATCATTGTGG
AAATTGGGGTGACTGTATAGCTGGGATTGGGCTAAGGACTGTGGTCTTATCTGTCCACATACAGCCAAAATGCCT
ATCCAGAAATCCAGTTCGTTGGAAAGGAAAAATGGTACTCCTGTGCCACAGGGGTTCCAGAAAAGGGAAGTCACT
TTACCTTGCGGTGGTGGGATCCTGATGTCTTTCATCCATTTGTAGTAAAAGCTGGTAAAGCTTTTCTTACTCCTG
GTTCCCTACCAGTATTTCTAAACATGTCGCACTTCTCCACAGGCATGTGGTTTTGACCTTTTTTCAATCTTCT
AGAAAGGGAACGGAAGCAGAAGTGGGACATCGAGGGCTCTGCTGTCTCTGCGCTGGGTGTGGAATGCTGTGCA
CCTGTCCCTTCTGCTGGCTCAGGGAAGTGTCTTCTTGCCACATTTCTGTGGGGAAAGGTTTTTAATCCTCTGAT
GCTTCCATCTTCTGTTTAGGCCATGTGCCCAGAAACCTGGACTGATCTTCTTTAATAGTGAACCCCTGGGCCA
CTGAAGAGTAACATGGCTCCACTGGACACAAAAGAGGGATGGAATCAACAGGCAGGGGGCTTTTATAAGCCTTA
GGAAAAAGAAAAAGAACTATTTTCATCTTTGGACTTTTCAATACTATTGGAGTGATTTTTTCTTTCTAAACAGGG
AAAATAATGTTACAAAAGCATCTTTTTTGTATTGTTTGCATCCCTCCCCACACCCTGGTGTTTTAAATGAA
GAAAAAAACCATCACCTTTTGTACAAAAGTCTTAATGATTAAAAAACAAACA

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FIGURE 3490

MFPPYSCWRTGLLLLLLAVAVRESWQTEKTCDLVGEKGKESKELALVKRLKPLFNKSFESTVGQGSPTYIYIF
RVCREAGNHTSGAGLVQINKSNGKETVVGRNLNETHIFNGSNWIMLIYKGGDEYDNHCGKEQRRVVMISCNRTL
ADNFPVSEERGKVQDCFYLFEMDSSLACSPESHLSVGSILLVTFASLVAVYVVGGLYQRLVVGAKGMEQFPH
LAFWQDLGNLVADGCDVCRSKPRNVPAAYRGVGDDQLGESEERDDHLLPM

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FIGURE 3491

CTGAGCTGTCCCTGCAGGACTCCAGTGGAAGTGAAAGAACTGGGCACCGGGGAAAAGCTAGGATGTCCCACACTC
CTACACCATGCAGGGAAGTCGGGCACAGGCCGGCTGGGCCGGGATCAGATGGGAAGCAGAAGCTCATCATGACCA
GAAACTGTTTTCCCTACGGAGAGCACTTGGAGATGGCAATGCTGAACCTCACACTGTAGGACTCACACACGACTCT
AACGGGATTGTAAGAATCAAGTCACTCTCATGGGAAGAATTTTTATATGGGAAAGCGGCTAAAACCTTTCATTGGA
CTGGAATGTTTGGAGATTGTTAAATTCCAAATCAGGAACCACAACTGCCCTCTAATAAGATATCAGCTGTCTAA
GCCTGTGGGTGCCGCCCTTCTGCCAGTAGTTCTGGTTCTTAAGAAAAGCACCATAAATCAGACATGAAAATTCTG
GCTCCAAAAATAGCATTTTTCTTTGTGCAAATAAAAACGTGTGTATCAAGTATGACGTTCCCCAACGTGGACACA
CTTGGTTCCCTCAGAAAGCCAAGCCCGCTGCAGCTGCCACATCCCAGGGCTTATGGTGCAGCAGGTGCTTTTTTCA
AGACAGGAATCAAAGTGTTAGGAACACGGCAGACAGGTGACACCTGGATACCAAATGCAGGATGAGGAGTACTGC
AGAGGTCACAGGGAAGTCACAGAACAGTAATACGCTAGCAGGGGCATGGGGCGTGAAGAACAGAAGAAGACAGTT
TGAGAAAAGCATCTGCAAAATGCTAAAGAGCAGAGCTTACCTCATTGCCTGTCCCCATCTCATCCCAGGTCACCA
CCTGGCTGACCCAGGTCCCCGACCCAACAACAACCCCTCCCAAGTCCCTAACTCCCTCACTTGGACTTGAGACC
CTTCACAACCCAGCAGCGCTCCGCCTCCAACGTGACATCATGCTTTCTGGAACCTTCCCCGTATGTCCCACCTTTC
CCACACTTGGTGCCCTGGAGCACCTTCCGGCCTCTACATGCTGTACGTTCCCTGTGAGCACCTCTCTCGGCC
TCTGGCCAACACAGTCCCACCCATCTGTGGGTAACAAACGGGTGTGTGTGTCTTTTTCAGCCTTGCTAAACTGTC
TGAATCAAGGATCACAACTACAGCCTGCAGGCCAAAGCCAGCCCACAGCCTGTGTTTGTAATAAAGCTTTTATT
GGAACAAAGCCACACCCCTTAATCTACAGATGATCTGTGGCTACTTTACACCACAACAGAGTACCATGGTTCTG
ACAGAGACTGGGGGACCCTGTCTAAATGACTTCTGACCTGGACCTTTACTGAAAAATCCTCCCAATCATTCTGTTG
ACAAGAATGGTGTATTACTTTTTGCAATAAGAAACAAGTAACCTTTGCAGAATTCCACCCATCTTTCAAGGCTGA
TCCCAGAAGTTCCCTCTGCCCACGCACCTACCTGATCCTGATCACTTCTTAACTGCAGCCCGGCCACCCGGCT
CCAGCATCATTGTGGAGTCTCAGCTCCATAAATCCAGAGGGCAGGTGGGGGTGTGTCTAATTTTCCGAGCCT
ACTGTACCGAAACAGGACAGCAGAGTAGGAAGCCTCTGTGACTTCTGCTCCCTCCCTAGCTTTTCCACCAGACCC
TGCATGGTCCCACCTGGCTGTGTGAAGCAGGGATCAGGGAGCGTGGCTCGATGTGAGTCTCCAGAACCCTGTCC
ACCCTGGCGTGGTGGCAGACATGGCTACCTGCAGCTGAGCTGCCAGTTCTCTGAGTCTCAAAGACCAGGCCAT
TTTCTTTATGTTTCACCAGCTCATGTAAACTGCAGAGAGAACCAAGGGAGCCTGAGAGCTGCCTGGGGAAGACAC
CAGACCCCTGGGGTGCCAGCTGGGCTCCCACCCACCCACGCTCAAGCCAGGCTGGGGGTGGAACAGGGGGTG
TGGTTCTGGGAGCTGGTTCTTAGATTGTCATCTGAAGGGTATAAAGGCCTGGGGGGGTGCACATCAAAATGA
CCAAATCGATTGAGGAGAGAGCCTTAAGGAAGGTTTGTACCTTCTGTGCTGGATGCTCTTCAAGGACTGAAGAA
TTATTTTTCATGTTTTTCTTAATCCATGGCCATGGAACAAGTAAAGGCAACCCCTGGGGACTGGTTTCAGCAC
ATAAAAGATGACTTTTCTAGGACACC

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FIGURE 3492

MVPPWLCEAGIRERGSMSVSRTLSTLAWQTWLPAAELPVPLSPQRPGHFLYVSPAHVNCRENQGS LRAAWGRHQ
TPGVPSWAPTHPTLKPGWGLEQGVWFLGAGS

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FIGURE 3493A

GTGGGGTGGGGTGGGGCTGGGGGCTTGTGCGCCCTTTCAGGCTCCACCCTTTGCGGAGATTATAAATAGTCATGAT
CCCAGCGAGACCCAGAGATGCTGTAATGGTAAGACTTTGGATCCTTCCTGAGGACGTGGAGAAAACCTTGCTGCTG
AGAAGGACATTTTGAAGGTTTTGTTGGCTGAAAAAGCTGTTTCTGGAATCACCCCTAGATCTTTCTTGAAGACTT
GAATTAGATTACAGCGATGGGGACACAGAAGGTCACCCAGCTCTGATATTTGCCATCACAGTTGCTACAATCGG
CTCTTTCCAATTTGGCTACAACACTGGGGTCATCAATGCTCCTGAGAAGATCATAAAGGAATTTATCAATAAAAC
TTTGACGGACAAGGGAAATGCCCCACCCTCTGAGGTGCTGCTCACGTCTCTCTGGTCCTTGCTGTGGCCATATT
TTCCGTCGGGGGTATGATCGGCTCCTTTTCCGTCGGACTCTTCGTCAACCGCTTTGGCAGGCGCAATTCAATGCT
GATTGTCAACCTGTTGGCTGTCACTGGTGGCTGCTTTATGGGACTGTGTAAAGTAGCTAAGTCGGTTGAAATGCT
GATCCTGGGTGCTTGGTTATTGGCCTCTTCTGCGGACTCTGCACAGGTTTTGTGCCCATGTACATTGGAGAGAT
CTCGCTACTGCCCTGCGGGTGCCTTTGGCACTCTCAACCAGCTGGGCATCGTTGTTGGAATTCGGTGGCCCA
GATCTTTGGTCTGGAATTCATCCTTGGGTCTGAAGAGCTATGGCCGCTGCTACTGGGTTTTACCATCCTTCCTGC
TATCCTACAAAGTGCAGCCCTTCCATTTTGGCCTGAAAGTCCAGATTTTGTCTAATAACAGAAAAGAAGAGGA
GAATGCTAAGCAGATCCTCCAGCGTTGTGGGGCACCAGGATGTATCCCAAGACATCCAGGAGATGAAAGATGA
GAGTGCAAGGATGTCAAGAAAAGCAAGTCACCGTGCTAGAGCTCTTAGAGTGTCAGCTACCGACAGCCCAT
CATCATTTCCATTGTGCTCCAGCTCTCTCAGCAGCTCTCTGGGATCAATGCTGTGTTCTATTACTCAACAGGAAT
CTTCAAGGATGCAGGTGTTCAAGAGCCCATCTATGCCACCATCGGCGCGGGTGTGGTTAATACTATCTTCACTGT
AGTTTCTCTATTTCTGGTGGAAAGGGCAGGAAGAAGGACTCTGCATATGATAGGCCTTGAGAGGATGGCTTTTTG
TTCCACGCTCATGACTGTTTTCTTTGTTATTAAAGGATAACTATAATGGGATGAGCTTTGTCTGTATTGGGGCTAT
CTTGGTCTTTGTAGCCTTCTTTGAAATTGGACCAGGCCCATTCCTGGTTTATTGTGGCCGAACCTTTCAGCCA
GGGCCCCCGCCCAGCTGCGATGGCAGTGGCCGGCTGCTCCAACCTGGACCTCCAACCTTCCTAGTCGGATTGCTCTT
CCCCTCCGCTGCTCACTATTTAGGAGCCTACGTTTTTATTATCTTCAACCGCTTCCTCATTACCTTCTTGGCTTT
TACCTTCTTCAAAGTCCCTGAGACCCGTGGCAGGACTTTTGAAGGATATCACACGGGCCTTTGAAGGGCAGGCACA
CGGTGCAGATAGATCTGGAAGGACGGCGTCATGGAGATGAACAGCATCGAGCCTGCTAAGGAGACCACCACCAA
TGTCTAAGTCGTGCCTCCTTCCACCTCCCTCCCGCATGGGAAAGCCACCTCTCCCTCAACAAGGGAGAGACCTC
ATCAGGATGAACCCAGGACGCTTCTGAATGCTGCTACTTAATTCTTCTCATCCACGCACTCCATGAGCAGCC
CAAGGCTGCGGTTTGTGGATCTTCAATGGCTTTTTAAATTTTATTTCTGACATCCTCTTCTGCTTAGGAGAG
ACCGAGTGAACCTACCTTCATTTAGGAGGGATTGGCCGCTTGGCACATGACAACTTTGCCAGCTTTTCTCCCT
TGGGTTCTGATATTGCCGCACTAGGGGATATAGGAGAGGAAAAGTAAGGTGCAGTTCCCCAACCTCAGACTTAC
CAGGAAGCAGATACATATGAGTGTGGAAGCCGGAGGGTGTATTGTAAAGAGCACCTTCTCACTTCCATACAGCT
CTACGTGGCAAATTAACCTGAGTTTTATTATTTATCTCTGGTTTAAATTACATAATTTTTTTTTTTTAACTTT
AAGTTTCAAGGATACATGTGCCGAATGTGCAGGTTTGTACATAGGTATATATATGCCATGATGGAAATATTTATT
TTTTTAAGCGTAATTTTGCCAAATAATAAAAACAGAAGGAAATTGAGATTAGAGGGAGGTGTTTAAAGAGAGGTT
ATAGAGTAGAAGATTTGATGCTGGAGAGGTTAAGGTGCAATAAGAATTTAGGGAGAAATGTTGTTTATTATTGGA
GGGTAAATGATGTGGTGCTGAGGTCTGTACGTTACCTCTTAACAATTTCTGTCTTCAGATGGAAACTCTTTAA
CTTCTCGTAAAAGTCATATACCTATATAATAAAGCTACTGATTTCCCTTTGGAGCTTTTTTCTTTAAGATAATAGT
TTACATGTAGTAGTACTTGAAATCTAGGATTATTAATAATATGGGCATTGTAGTTAATGATGGTTGATGGGTTT
TAATTTTGGATGGAGTCCAGGGAAGAGAAAGTGATTTCTAGAAAGCCTGTTCCCTCACTGGATGAAATAACTCC
TTCTGTAGTAGTCTCATTACTTTTGAAGTAATCCCGCCACCTATCTCGTGGGAGAGCCATCCAATAAGAAACC
TAAATAAATTGGTTCTTGGTAGAGATTCATTATTTTCCACTTTGTTCTTTAGGAGATTTTAGGTGTTGATTTTC
TGTGTATTTTAACTCATACCTTTAAAGGAATTTCCCAAAGAATGTTTATAGCAAACCTTGAATTTGTAACCTCA
GCTCTGGGAGAGGATTTTTTCTGAGCGATTATTATCTAAAGTGTGTTGTTGCTTTTAGGCTCACGGCAGGCTTGC
GTATGCTCGTTACCATGTCACTGTGGTCTATGCCGAATGCCCTCAGGGGACTTGAATCTTTCCAATAAACCAGG
TTTAGACAGTATGAGTCAATGTGCAGTGTAGCCCACTTGAGAGGATGAATGTATGTGCATGTCACTTTGTCTC
TGGGTGGAAGTAGCTTATTGTTGACTTATTTCTCTGTGTTTGTTCCTACAGCCCCTTTTTCATATGTTGTCTCAG
TCTCCCTTTCCCTTCTTGGTGCTTACACATCTCAGACCCTTTAGCCAAACCCTTGTCAGTGACAGTATTTTGGTT
CTTAGTTCTCACTGTTCCCTCTGCTCCTGGAGCCTTTGAATAAAAATGCACGTAGCTGAGGCCGGATGCGGTGGC
TCACGCCTGTAATCCAGCACTTTGGGAGGCCTAGCGGGCGGTGAGGGTTTCGAGACCAGTCTGGCCAACATCG
TGAAACCCTGTCTCTACTAAAAATGCAAAAATTAGCCGGGCGTGGTGGCGGGCGCCTGTAATCCAGCTACTTGG

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FIGURE 3493B

GAAGCTGAGGCGGGAGAATCATGTGAACCCGGGACGCAGGGGTTGCAGTGAGCGGAGATCGCATCATTGCACTCT
AGCCTGGGCCACAGGGCGAGACTCCGTCTCAAAAAAAAAAAAAATGCACATAGCTATCAAGTGTGCTTTAGCTTGA
AAAGGTGACCTTGCAACTTCATGTCAACTTCTGGCTCCTCAAACAGTAGGTTGGCAGTAAGGCAGGGTCCCATT
CTCACTGAGAAGATTGTGAATATTTCCATATGGATTTTCTATTGTTACTCTGGTTCTTTGTTTTAAAAATAAAAAAT
TCTGAATGTACACG

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FIGURE 3494

GGCCAAGGCAAGATGGGTCAAAGTCAGAGTGGTGGTCATGGTCCTGGAGGTGGCAAGAAGGATGACAAGCTCTAA
CAACTCAAGGACAAGAAAAAGAAATATGAACCTCCTGTACCAACTACAGTGGGGAAAAAGAAGAAGAAAAACAAAG
GGACCAGATGCTGCCAGCAAACCTGCCACTGGTGACACCTCACACTCAGTGCCAGTTAAAATTACTGAAGTTAGAG
AGAATTAAAGACTATCTTCTCATGGAGGAAGAAATTCATTAGAAATCAGGAACAAATGAAACCATTAGAAGAAAAG
CAAGAAGGGGAAAAGATCAAAGTGATGATCTGAGGGGGACCCCAATGTCAGTAGGAATCTTGGAAGAGATCATT
GATGACAATCATGCCATCGTGTCTACATCTGTGGGCTCAGAACACTACATCAGCATTCTTTTCATTTGCAGACAAG
GATCTTCTGGAACCTGGCTGCTCGGTGTCAGGCTCAACCACAAGGTGCATACCATGATAGGGGTGCTGATGGATGAC
ATGGATCCCCTGGTCACAGTGATGAAGGTGGAAAAGGCCCCCAAGAGACCTATGCAGATACTGGGGGGTTGGAC
AACCAAATTCGGGAAATTAAGGAATCTGTGGAGCTTCCTCTCACCCATCCTGAATATTATGAAGAGATGGGTATA
AAGCCTCCAAGGGGGTCATTCTCTGTGGTCCACCTGGCACAGGTAAAACCTTGTTAGCCAAAGCAGTAGCAAACC
AAACCTCAGCCACTTCTTGAGAGTGGTTGGCTCTGAACTTATTGAGAAGTACCTAGGTGATGGGCCCCAACTCG
GACGGGAATTGTTTCGAGTTGCTGAAGAACGTGCACCGTCCATTGTGTTTATTGATGAAATTGACGCCATTGGGA
CAAAAAGATATGACTCCAATTCTGGTGGTGAGAGAGAAATTCAGCGAACAACGTTGGAAGTCTGAACCAGTTGG
ATGGATTTGATTCTAGGGTAGATGTGAAAGCTATCATGGCCACAAACCAATAGAACTTTGGATCCAGCGCTTA
TCAGACCAGGCCGCAATTGGCAGGAAGATTGAGTTCCCCCTGCCTGATGAAAAGACGAAGAAGCCCATCTTTCAGA
TTCACACAAGCAGGATGACGCTGGCTGATGATGTAACCTGCACGACTTGATCATGGCTAAAGATGACCTCTCTG
GTGCTGACATCAAGGCAGTCTGTACAGAAGCTGGTCTGATGGCCTTAAGAGAACGTAGAATGAAAGTAACAAATG
AAGACTTCAAAAAATCTAAAGAAAATGTTCTTTATAAGAAACAGGAAGACACCCCTGAGGGGCTGTATCTCTAGT
GAACTACGGCTGCCATCAGGAAAATGGTTGGGTGATTTCTCAGTCCCTGAAAGGGATGAGGCTGGGGGAGTTGCC
CAGAGGAATCTCTGTTCCCATTTGATTTTTATTAGCAAAACATCCTGTGTCTTTTGGAGTACGATGTGTAAGTGCC
CACTGGGTGGCCTGTCTGTTGGTCACGTGTCAGCAGTCTGCTTCCCAATAAAGCGCGCTCTTTCACAA

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FIGURE 3495

GCAAAC TGCCACTGGTGACACCTCACACTCAGTGCCAGTTAAAATTACTGAAGTTAGAGAGAATTAAAGACTATC
TTCTCATGGAGGAAGAATTCATTAGAAATCAGGAACAAATGAAACCATTAGAAGAAAAGCAAGAAGGGAAAAGAT
CAAAAGTGGATGATCTGAGGGGGACCCCAATGTCAGTAGGAATCTTGGAAGAGATCATTGATGACAATCATGCCA
TCGTGTCTACATCTGTGGGCTCAGAACACTACATCAGCATTCTTTCATTGTCAGACAAGGATCTTCTGGAACCTG
GCTGCTCGGT CAGGCTCAACCACAAGGTGCATACCATGATAGGGGTGCTGATGGATGACATGGATCCCTGGTCA
CAGTGATGAAGATTCGGGAAATTAAGGAATCTGTGGAGCTTCCTCTCACCCATCCTGAATATTATGAAGAGATGG
GTATAAAGCCTCCAAGGGGGTCATTCTCTGTGGTCCACCTGGCACAGGTAAAACCTTGTTAGCCAAAGCAGTAGC
AAACCAAACCTCAGCCACTTTCTTGAGAGTGGTTGGCTCTGAAC TTATTCAGAAGTACCTAGGTGATGGGCCCAA
ACTCGGACGGGAATTGTTTCGAGTTGCTGAAGAAC

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FIGURE 3496

CAAGAAATATGAGATAGAAGGGGAGGGGTAGGAGGAGAGGGAGGGTAGGAAGACAGTTTGCATTCTTGCAACA
TTAAACCAAAGGGACTTGGAGTGCAGATGGCATCCTTCGGTTCCTCCAGACAAGCTGCAAGACGCTGACCATGGC
CAAGATGGAGCTCTCGAAGGCCTTCTCTGGCCAGCGGACACTCCTATCTGCCATCCTCAGCATGCTATCACTCAG
CTTCTCCACAACATCCCTGCTCAGCAACTACTGGTTTGTGGGCACACAGAAGGTGCCAAGCCCCCTGTGCGAGAA
AGGTCTGGCAGCCAAGTGCTTTGACATGCCAGTGTCCCTGGATGGAGATACCAACACATCCACCCAGGAGGTGGT
ACAATACAACCTGGGAGACTGGGGATGACCGGTTCTCCTTCCGGAGCTTCCGGAGTGGCATGTGGCTATCCTGTGA
GGAAACTGTGGAAGAACCAGGGGAGAGGTGCCGAAGTTTCATTGAACTTACACCACCAGCCAAGAGAGGTGAGAA
AGGACTACTGGAATTTGCCACGTTGCAAGGCCCATGTACCCCACTCTCCGATTTGGAGGGAAGCGGTTGATGGA
GAAGGCTTCCCTCCCTCCCTCCCTCCCTTGGGGCTTTGTGGCAAAAAATCCTATGGTTATCCCTGGGAACGCAGATCA
CCTACATCGGACTTCAATTCATCAGCTTCCTCCTGCTACTAACAGACTTGCTACTCACTGGGAACCCCTGCCTGTG
GGCTCAAACCTGAGCGCCTTTGCTGCTGTTTCCCTCTGTCCTGTGAGGTCTCCTGGGGATGGTGGCCACATGATGT
ATTACAAAGTCTTCCAAGCGACTGTCAACTTGGGTCCAGAAGACTGGAGACCACATGTTTGGGAATTATGGCTGGG
CCTTCTACATGGCCTGGCTCTCCTTACCTGCTGCATGGCGTCGGCTGTCAACACCTTCAACACGTACACCAGGA
TGGTGCTGGAGTTCAAGTGCAAGCATAGTAAGAGCTTCAAGGAAAACCCGAACTGCCTACCACATCACCATCAGT
GTTTCCCTCGGCGGCTGTCAAGTGCAGCCCCCACCCTGGGTCCCTTTGACCAGCTACCACCAGTATCATAATCAGC
CCATCCACTCTGTCTCTGAGGGAGTCGACTTCTACTCCGAGCTGCGGAACAAGGGATTTCAAAGAGGGGCCAGCC
AGGAGCTGAAAGAAGCAGTTAGGTCATCTGTAGAGGAAGAGCAGTGTTAGGAGTTAAGCGGGTTTGGGGAGTAGG
CTTGAGCCCTACCTTACACGTCTGCTGATTATCAACATGTGCTTAAGCCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3497

MELSKAFSGQRTLLSAILSMLSLSFSTTSLLSNYWFVGTQKVPKPLCEKGLAAKCFDMPVSLDGDNTNSTQE VVQ
YNWETGDDRF SFRSFRSGMWLSCEETVEEPGERCRSFIELTPPAKRGEKGLLEFATLQGPCHPTLRFGGKRLMEK
ASLPSPPLGLCGKNPMVIPGNADHLHRTSIHQLP PATNRLATHWEFCLWAQTERLCCCF LCPVRSPGDGGPHDVF
TSLPSCQLGSRRL ETTCLELWLGLLHGLALLHLLHGVGCHHLQH VHQDGAGVQVQA

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FIGURE 3498

ATAACAGCATGAAGTGCCGTGGAAC TGGAA TAGGCGTGTCTCTCCCTCGACCC TCCCCCTCCTTGTCCTCTGC
TCACCCCTCGCTCGTTCCCTCCCTCCGGCGAGGGCCGCCTTTATAACA ACTGCTCAGAGTGCAGGGCGGGATAG
CTGTCCAAGGTCTCCCCAGCACTGAGGAGCTCGCCTGCTGCCCTCTTGCGCGCGGGAAGCAGCACCAAGTTCAC
GGCCAACGCCTTGCGACTAGGGTCCAGA ATGGCTACAACAGTCCCTGATGGTTGCCGCAATGGCCTGAAATCCAA
GTACTACAGACTTTGTGATAAGGCTGAAGCTTGGGGCATCGTCTTAGAAACGGTGCCACAGCCGGGGTTGTGAC
CTCGGTGGCCTTCATGCTCACTCTCCCGATCCTCGTCTGCAAGGTGCAGGACTCCAACAGGCGAAAAATGCTGCC
TACTCAGTTTCTCTTCTCCTGGGTGTGTTGGGCATCTTTGGCCTCACCTTCGCCTTCATCATCGGACTGGACGG
GAGCACAGGGCCACACGCTTCTTCTCTTTGGGATCCTCTTTTCCATCTGCTTCTCCTGCCTGCTGGCTCATGC
TGTCACTCTGACCAAGCTCGTCCGGGGGAGGAAGCCCTTTCCCTGTTGGTGATTCTGGGTCTGGCCGTGGGCTT
CAGCCTAGTCCAGGATGTTATCGCTATTGAATATATTGCTGACCATGAATAGGACCAACGTCAATGTCTTTTC
TGAGCTTTCCGCTCCTCGTCGCAATGAAGACTTTGTCTCCTGCTCACCTACGTCTCTTCTTGATGGCGCTGAC
CTTCTCATGTCTCTTCCCTTCTGTGGTTCCTTCACGGGTGGAAGAGACATGGGGCCACATCTACCTCAC
GATGCTCCTCTCCATTGCCATCTGGGTGGCCTGGATCACCTGCTCATGCTTCCTGACTTTGACCGCAGGTGGGA
TGACACCATCCTCAGCTCCGCTTGGCTGCCAATGGCTGGGTGTTCTGTTGGCTTAAGTTAGTCCCAGATTTTG
GCTGCTCACAAGCAACGAAACCCCATGGATTATCCTGTTGAGGATGCTTTCTGTAAACCTCAACTCGTGAAGAA
GAGCTATGGTGTGGAGAACAGAGCCTACTCTCAAGAGGAAATCACTCAAGGTTTTGAAGAGACAGGGGACACGCT
CTATGCCCCCTATTCCACACATTTT CAGCTGCAGAACCAGCCTCCCCAAAAGGAATTCTCCATCCCACGGGCCCCA
CGCTTGGCCGAGCCCTTACAAAGACTATGAAGTAAAGAAAGAGGGCAGCT TAACTCTGTCTCTGAAGAGTGGGACAA
ATGCAGCCGGGCGGCAGATCTAGCGGGAGCTCAAAGGGATGTGGGCGAAATCTTGAGTCTTCTGAGAAAACTGTA
CAAGACACTACGGGAACAGTTTGCCTCCCTCCCAGCCTCAACCACAATTCTTCCATGCTGGGGCTGATGTGGGCT
AGTAAAGACTCCAGTTCTTAGAGGCGCTGTAGTATTTTTTTTTTTTTTTGTCTCATCCTTTGGATACTTCTTTTAAGT
GGGAGTCTCAGGCAACTCAAGTTTAGACCTTACTCTTTTTTGTGTTGTTTTTGAACAGGATCTTGCTCTGTAC
CCAGGCTTGAGTGCAGTGGTGCGATCACAGCCAGTGCAGCCTCGACCACCTGTGCTCAAGCAATCCTCCCATCT
CCATCTCCCAAAGTGCTGGGATGACAGGCGTGAGCCACAGCTCCCAGCCTAGGCCCTTAATCTTGCTGTTATTTT
CCATGGACTAAAGGTCTGGTCACTGTAGCTCACGCTGGCTCACACAGCTCTAGGGGCCTGCTCCTCTAACTCACA
GTGGGTTTTGTGAGGCTCTGTGGCCAGAGCAGACCTGCATATCTGAGCAAAAAATAGCAAAAGCCTCTCTCAGCC
CACTGGCCTGAATCTACACTGGAAGCCAAC TTGCTGGCACCCCCGCTCCCCAACCTTCTTGCTGGGTAGGAGA
GGCTAAAGATCACCTAAATTTACTCATCTCTCTAGTGTGCTGCCTCACATTGGGCCTCAGCAGCTCCCCAGCACC
ATTACAGGTCAACCCCTCTCTTCTTGCACTGTCCCCAAACTTGCTGTCAATTCCGAGATCTAATCTCCCCCTACG
CTCTGCCAGGAATTTCTTTCAGACCTCACTAGCACAAAGCCCGTTGCTCCTTGTCAGGAGAATTTGTAGATCATTC
TCACTTCAAATTCCTGGGGCTGATACTTCTCTCATCTTGACCCCCAACCTCTGTAAATAGATTTACCGCATTTAC
GGCTGCATTCTGTAAAGTGGGCATGGTCTCCTAATGGAGGAGTGTTCATTGTATAATAAGTTATTCACCTGAGTAT
GCAATAAAGATGTGGTGGCCACTCTTTCATGGTGGTGGCAGCAAAAAAAAAAAAAA

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FIGURE 3499

MATTVPDGCNGLKSKYYRLCDKAEAWGIVLETVATAGVVTSAFMLTLPILVCKVQDSNRRKMLPTQFLFLLGV
LGIFGLTFAFIIGLDGSTGPTRFFLFGILFSICFSCLLAHAVSLTKLVGRKPLSLLVILGLAVGFSLVQDVIAI
EYIVLTMNRTNVNVFSELSAPRRNEDFVLLTTYVLFMALTFMSSFTFCGSFTGWKRHGAHIYLTMLLSIAIWV
AWITLLMLPDFDRRWDDTILSSALAANGWVFLAYVSPEFWLLTKQRNPMDY PVEDAFCKPQLVKKSYGVENRAY
SQEEITQGFEEETGDTLYAPYSTHFQLQNQPPQKEFSIPRAHAWPSPYKDYEVKKEGS

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FIGURE 3500

GGTACCTCGTGGAGAAGACGGGGGAGGGGAGCAGCGAGATTTCTTGCGGAGCAATATTCCTAGGGTACAGACCT
CGTAGCCCCGGGCCCCGCGACTCCGCCCCGGGAGCGGGCAGGGGCGGGGCGAGCGCTCCAGCTGGCGGGAAGGAGGA
AGGGCCGGGCGCGGCGCAGAGGCGGGCGCCTACCAGCCGGCAGCTCCGGAGCTGCCCCGCGCCATGTCCGCGCACA
ATCGGGGCACCGAGCTCGACCTTAGCTGGATCTCCAAAATACAAGTGAATCACC CGGCAGTTCTGAGGCGTGCGG
AACAAATCCAGGCTCGCAGAACCGTGAAAAAGGAGTGGCAGGCTGCTTGGCTCCTGAAAGCTGTTACCTTTATAG
ATCTTACTACACTTTTCAGGTGATGATACATCTTCCAACATTCAAAGGCTCTGTTATAAAGCCAAATACCCAATCC
GGGAAGATCTCTTAAAAGCTTTAAATATGCATGATAAAGGCATTACTACAGCCGCCGTTTGTGTTTATCCCGCCC
GGGTGTGTGATGCTGTAAAAGCACTCAAGGCTGCAGGCTGTAATATCCCTGTGGCATCAGTGGCCGCTGGATTTC
CAGCTGGACAGACTCATTTGAAGACACGATTAGAAGAGATCAGATTGGCTGTGGAAGATGGAGCTACAGAAATCG
ACGTGGTAATTAACAGAAGCTTGGTGCTGACAGGCCAGTGGGAAGCCCTGTATGATGAGATTTCGTCAGTTTCGCA
AGGCCTGTGGGGAGGCTCATCTTAAACTATATTAGCGACAGGAGAAGCTTGGAACCTTACTAATGTCTATAAAG
CCAGTATGATAGCAATGATGGCAGGATCAGATTTTATTAAGACCTCTACTGGAAGAAACAGTAAATGCCACCT
TCCCGGTAGCTATAGTAATGCTGCGGGCCATTAGAGATTTCTTCTGGAAGAACTGGAACAAGATAGGGTTTAAAC
CAGCAGGAGGCATCCGCAGTGCAAAGGATTCCTTGCTTGGCTCTCTCTTGTAAGGAGGAGCTTGAGATGAGT
GGCTGAAGCCAGAATCTTTTGAATAGGTGCCAGTACTCTGCTCTCGGACATTGAGAGGCAGATTACCATCATG
TGA CTGGAAGATATGCAGCTTATCATGATCTTCCAATGTCTTAAATCAGTCACCAAGTTCAGAAAAAGTTCTTTAC
GACAATGTTTTAAAAATTATTTTCTACGTAATTGCTAAAATTATTTAATTAAAAAATTGGGCAGTAGGTAAGTGG
CATTCTCTCTTTAAAATTTCTACCGAACTTAATGGAATGGAAAAAGCAAACCTCATCCACATGTGGTACTCATTT
CAGGCACATCTGAAATGATCTTAATTACTAGAAGATCTGCACTATTAACCTTGTGAAGAGTTTCTCCTAAAAACT
TTAAGTAAATGTTAATGGTAGCTTTGATAACATCAAATCTAAGGGAGAAAAAACAATATTAAACCGCCCAAG
CAGTGTGCCCTAGCAGAGGAAAATGCAACATCTCGCAAGCGCTGCTGTAACGACTTCAGGAGTCACTGATTCAGC
ACTAATTTCTGCTGTGAAAACCTCATCTTTCAATTTTGCCGTGGATAGGCGCTTTTATTAATTGTTGTCCTAATG
AAATTTCTGACATTGTCATATACAACGATGAATATCATTAAAAATTTTAA

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FIGURE 3501

TGTGGACGCTGTGAATCGTGGCTGGCCCCGGTTCTCCGCTTCTCCCCATCCCCTACTTTCTCCCTCCCTCCCTTT
CCCTCCCTCGTCGACTGTTTTCTTGCTGGTCGCAGACTCCCTGACCCCTCCCTCACCCCTCCCTAACCTCGGTGCC
ACCGGATTGCCCTTCTTTTCTGTTGCCAGCCAGCCCTAGTGTGAGGGCGGGGGCCTGGAGCAGCCCGAGGCA
CTGCAGCAGAAGAGAGAAAAGACAACGACGACCCTCAGCTCGCCAGTCCGGTCGCTGGCTTCGCCGCCGCCATGG
CAATGAGACAGACGCCGCTCACCTGCTCTGGCCACACGCGACCCGTGGTTGATTGGCCCTCAGTGGCATCACGC
CTTATGGGTATTTCTTAATCAGCGCTTGCAAAGATGGTAAACCTATGCTACGCCAGGGAGATACAGGAGACTGGA
TTGGAACATTTTTGGGTATATAAGGTGCTGTTTGGGGTGCAACACTGAATAAGGATGCCACCAAAGCAGCTACAG
CAGCTGCAGATTTACAGCCAAAGTGTGGGATGCTGTCTCAGGAGATGAATTGATGACCTGGCTCATAAACACA
TTGTCAAGACTGTGGATTTACGCGAGGATAGTAATTATTTGTTAACCGGGGACAGGATAAACTGTTACGCATAT
ATGACTTGAACAAACCTGAAGCAGAACCTAAGGAAATTAGTGGTCATACCTTCTGGTATAAAAAAGCTCTGTGGT
GCAGTGAGGATAAACAGATTTCTTCTGCTGATGACAAAACCTGTTGACTTTGGGATCATGCTACTATGACAGAAG
TGAAATCTCTAAATTTAATATGTCTGTTAGTAGTATGGAATATATTCCTGAGGGAGAGATTTGGTTATAACTT
ATGGACGATCTATTGCTTTTCTAGTGACAGTAAGTTTGGACCCAATTAAATCCTTTGAAGCTCCTGCAACCATCA
ATTCTGCATCTCTTCATCCTGAGAAAGAATTTCTTGTGTCAGGCGGTGAAGATTTAAACTTTATAAGTATGATT
ATAATAGTGGAGAAGAATTAGAATCCTACAAGGGACACTTTGGTCTATTCACTGTGTGAGATTTAGTCCTGATG
GAGAACTCTATGCCAGTGGTTTCAAGATGGAACATTGAGACTATGGCAAACCTGTGGTAGGAAAAACGTATGGCC
TTTGAAATGTGTGCTTCCTGAAGAAGATAGTGGTGAGCTGGCAAAGCCAAAGATTGGTTTTCCAGAGACAACAG
AAGAGGAGCTAGAAGAAATTGCTTCAGAGAATTCAGAGTGCATCTTTCCTTCAGCTCCTGATGTTAAGGCCCTGAG
CGTCAATCATATGTTGCAGTTAGTATACAACCTGACTAAAACAAGCAAGCAGAGAAAAAGCATCAGCCTTCAGAGT
TACTGCTGCTTAAGGCAGAAACAGCAGTAAATAATGAGGAAAATGAATTAGCTCCAGTGCTGGAACAACCTAACT
AACTTGGTGTACCTGTAAGTGAACCTCAAGTGTGAGTGAAGGGAGGTGGAGTTATCCTCTTATAGTACAGTG
GCCTGTTATCTTTTTAATGAATATATACAAGCCAACATCCAATTTCTATTATTACAATTAGGGTTCTTGTAGCTG
TTTATGTTAATATGGAGAAGAAACTATATTGGCTGATTTTTTCTGATCTTAAAGCAGAAATGCCTTTTCTTTTT
TTGCTTCAGTTGTAAAGAAGAGGGAATACATGATAAAGTAACTGGTTTGATTCTCGTTCATTGTACACTGCCTC
TGAACATCTAATTGTTTTTAGTTGTCTAAATAAAATGCCTCTAAAACAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3502

MAMRQTPLTCSGHTRPVVDLAFSGITPYGYFLISACKDGKPMRLRQGDWIGTFLGHKGAVWGATLNKDATKAA
TAAADFTAKVWDAVSGDELMTLAKKHIVKTVDFQTQDSNYLLTGGQDKLLRIYDLNKPEAEPKEISGHTSGIKKAL
WCSEDKQILSADDKTVRLWDHATMTEVKSLNFMNSVSSMEYIPEGEILVITYGRSIAFHSAVSLDPIKSFEAPAT
INSASLHPEKEFLVAGGEDFKLYKYDYNSGEELESYKGHFGPIHCVRFSPDGELYASGSEDGTLRLWQTVVGKTY
GLWKCVLPEEDSGELAKPKIGFPETTEEELEEIASENSECIFPSAPDVKA

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FIGURE 3503

CCAGGGTTTCCTCTTCAAGTAGGTCTAAAACATTTTTTTTTTCTCATTGACTTCCTTCCTGTTCTAACTGCCAGTA
CTCAGAAGTCAGAGTTGAGAGACAGAGGCACCCCGGACAGAGACGTGAAGCACTGAATAAATAGATCAGAATGAC
TGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGATGATGATGAGCTGGACAGCAAGCTCAATTATAAGCCTCC
ACCACAGAAGTCCCTGAAAGAGCTGCAGGAAATGGACAAAGATGATGAGAGTCTAATTAAGTACAAGAAAACGCT
GCTGGGAGATGGTCCTGTGGTGACAGATCCGAAAGCCCCCAATGTCGTTGTACCCCGGCTCACCCCTGGTTTGTGA
GAGTGCCCCGGGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCCTCAAAAAGGAAAACCATTTGTGTTAAA
GGAAGGTTCTGAATATAGAGTCAAAATTCACCTTCAAAGTGAACAGGGATATTGTGTGTCAGGCCTGAAATACGTTCA
GCACACCTACAGGACTGGGGTGAAAGTGGATAAAGCAACATTTATGGTTGGCAGCTATGGACCTCGGCCTGAGGA
GTATGAGTTCTCACTCCAGTTGAGGAGGCTCCCAAGGGCATGCTGGCGCGAGGCACGTACCACAACAAGTCCTT
CTTCACCGACGATGACAAGCAAGACCACCTCAGCTGGGAGTGGAACTGTGCGATTAAAGAGGAGTGGACAGAATG
AATGCATCCACCCCTTTCCCCACCCTTGCCACCTGGAAGAATTCTCTCAGGCGTGTTTCAGCACCCCTGTCCCTCCT
CCCTGTCCACAGCTGGGTCCCTCTTCAACACTGCCACATTTCCCTATTGATGCATCTTTTCCCACCCTGTCACTC
AACGTGGTCCCTAGAACAAGAGGCTTAAACCGGGCTTTCACCCAACCTGCTCCCTCTGATCCTCCATCAGGGCC
AGATCTTCCACGTCTCCATCTCAGTACACAATCATTTAATATTTCCCTGTCTTACCCCTATTCAAGCAACTAGAG
GCCAGAAAATGGGCAAATTATCACTAACAGGTCTTTGACTCAGGTTCCAGTAGTTCAATTCTAATGCCTAGATTCT
TTTGTGGTTGTTGCTGGCCCAATGAGTCCCTAGTCACATCCCCTGCCAGAGGGAGTTCTTCTTTTGTGAGAGACA
CTGTAAACGACACAAGAGAACAAGAATAAAACAATAACTGTG

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FIGURE 3504A

ATGGCCGACCTGGAGGAGCTCTCCCGCTGAGCCCTCTGCCCCCGGCAGCCCGGGTTCGGCGGCGCGGGGCCGG
GCTGAGCCCCCGAGGAGGAGGAGGAAGAGGAGGAGGAGGAAGAGGAGGCGGAGGCCGAGGCGGTGGCGGCGCTG
CTGCTGAACGGCGGCGAGCGGTGGGGGCGGCGGAGGCGGCGGCGGAGGAGTGGGGGCGGCGAGGCAGAGACGATG
TCGGAGCCGAGCCCCGAGAGCGCCAGCCAGGCCGGGGAGGACGAAGACGAGGAGGAGGACGACGAGGAGGAGGAA
GATGAGAGCAGCAGCAGCGGCGGGGTGAGGAGGAGAGTAGCGCCGAGAGCCTGGTGGGCAGCAGCGGCGGGAGC
AGCAGCGACGAGACCCGCTCGTTGAGCCCCGCGCCGCCAGCAGCAGCAGCGGGGATGGGGACGGCAAGGAGGGC
CTGGAGGAGCCCCAAGGGACCGCGGGGCGAGCCAGGGCGGCGGCGGGGCGGCGAGCAGTAGCAGCAGCGTAGTCTCC
AGCGGCGGGCGACGAGGGCTACGGGACTGGGGGAGGCGGAAGCAGCGCGACCTCCGGGGGCGGCGGGGCGAGCTTG
GAGATGTCGTCGGATGGGGAACCCCTGAGCCGCATGGACTCGGAGGACAGCATAAGCAGTACTATAATGGATGTA
GACAGCACAAATTTCCAGTGGGCGTTCAACTCCAGCAATGATGAATGGACAAGGAAGCACTACTTCTTCAAGCAAA
AATATTGCCTATAATTGTTGTTGGGACCAGTGCCAGGCTTGCTTCAACTCTAGCCCAGATCTGGCAGATCACATC
CGTTCCATACATGTAGATGGTCAGCGAGGAGGGGTATTTGTTTGCTTATGGAAAGGTTGTAAAGTATATAACACT
CCATCTACCAGTCAAAGTTGGTTACAAAGGCATATGCTGACACACAGTGGAGACAAACCTTTCAAGTGTGTTGTT
GGTGGCTGCAATGCCAGCTTTGCTTCTCAGGGAGGGCTAGCTCGTCATGTACCCACACACTTCAGTCAGCAGAAC
TCCTCAAAGTTTCTAGCCAGCCAAAGGCCAAAGAAGATCTCCTTCTAAAGCTGGAATGAACAAAAGGAGGAAA
TTAAAGAACAAAGACGACGCTCATTACCACGCCACATGATTTCTTCGATGCACAAACACTGGATGCGATAAGA
CATCGAGCCATATGCTTTAACCTCTCAGCTCATATAGAAAGTTTAGGGAAAGGGACACAGTGTGTTTTTCATAGT
ACTGTAATAGCTAAGAGAAAAGAAGATTCTGGGAAGATCAAACCTTTTGCTTCATTGGATGCCTGAAGACATTCTG
CCTGATGTGTGGGTGAATGAAAGTGAACGACATCAGTTAAAAACTAAAGTAGTTTATTTATCAAAGCTACCCAAA
GATACTGCCCTTGCTTTTGACCCAAACATATACAGAACAATGCCGCGAGAAGAGGTTGAAGAGGTAAAAAATAAAT
AAATACATAAAAAGCAAACAAGCGGGGACACCTGCAGTCTTAGTCACTGACAATGGGTTTAGGGAAAGTTGCACA
TTAGAGTCAACCCCTTCTTTTTTTTTTTTTTTTTTAAATCCAGTATTTAGGATAATATTTATGCTTAGTGTA
ACATTCTGTGAATGAAGTAGACTCTTCGGTGAATATATTAATATATTACTGTATATCCACATTTTCATGGAATG
GTACTGTGGGAGACTGAGCAAACACTCTTTTGCAACTTAGTAGAACAGCTTCTTAAAGGCTTTGCATGCTTGCT
GCTTTAAGCTGCTTTTTTTTTTCTTTCTCCCTTTAGTGATTTTCACTAGTTTATATTGGAAAGAAAAACAATTA
CAACATGTGCCCTTACAAATACCAAAGCACTGTAAGGATATTTGTCTTGACAGTGTTTATTGATTGGAAGTCAT
ATTAGGAAATATTTAGACAATGAAAATTATCAAGAGATAATTTACCTTTCAATTATGATAAATAGATGTGATTGG
TTGCCATTTGTGTTCTTTTGCAAACTCTGATAAGAAAAGTGTTCAATTTGTATTTAAGCAAACAGTGAACGACG
TTTGCAATCACTAAAAATTCGTCTATCGAATTAGGGCTGAAAATTACTGTTAAAGAGTGTTGCAGTATGCTGG
TGGCTCCCTTTTCAGGACTAGGGCTTCTCATGGAGTACAGTATGTTAATATTTACCTATATACTAATCTGTTA
ACGGTTTTTGAAAAACCTTTCAAATTATTTGAATAATCTTCATATTTTCACTTAACCTATATGACTCTAATTTTT
TTTTCTGAGGAAATCATTTGGTTTTGAGTTGTTTTTCTTAATGTAAGAAAATTGTATTTTTTTTACAAGTATC
TTCAAACCTGAATCTTTTATGCACCAAAGTTGGTCTTGAAAAGGAAAATAAAATCACTTTCTTGCTTGGTAAGCAA
GAAGCCATATCGATTTTTTTTAACTTACAGAAATGGAATATGTGTAACCTGTTAGTATTGTATTAACAAATGT
TGCATAGAGATAATAGAACATTGCTTGTAATAATTGAGCAGATTTGTAATATATTTTTTATATTTTGAATGTAC
TGTAGATGTTTTCTAGAGGCATGAAAGTTAAATGTATATATTATGGTAGAAATAATATTGAAGGATATTGTACTT
CACTAGTGCTGCCAGAGGAATTGTTAATAAAAGCACCTTCTTTAACAATAAATGTCTTTACAGACTTAAGGGAC
TATGTACTACTGTTAATATCTCTAAGAACAAACACATTGAACATCCTTCCAGAAAGTCTTTGAGGGAGGACCTA
TACCCATAATAGAATTATGGCACTCATTTCTGACAGTGATCAAGAAATCAGTTATTTCTTACTGTTGGAAGGAC
ATTGTAAAGTATGTGGTTATATGCAGTGAAACTGCAGAAAATACTCCTGGTTGAGGAGTTTTCACTTTACTACAG
TGATATAAAAACCAGCAGTTTTTACACTAAATTTTTTAAAGAAATATTAGACAAAAATATAGAATTAAAACCTTT
GGTTCCAAAATGGGAAAGGTTCCACGATACATAAATCATTTCTCATTTGCTTTAAAAAATTTAAAGTGTAAGGAA
TTATGAGAGACTTTATTCGTTAACAATGGGGGTAAAGAGCTATATACATGAAAATGAGTCTTATAAAATTAAGTG
AAGTGCAAATAAAAGCACTGCTACTATAAGACATTCTGGAATGGTTGTTTAAATAAGGGTATTATCCATTTGATCT
ATAGCAATGTGATTTTATTTTTTAAAGAAAAGCAGTGTTGTTTTCTTTTTTGTGTTTTCTTTTGCTTAAGCAC
TTCATCAATTGCTTTATTTCTGTATCTGCGAAGTAATCTGCAATCTTTTTGTTCTTTTTTAAATTTGATTTGTTA
TAAATTTGCCAAATAGAAGTGTTCAGATACATAGTTTGACCTGTATTTTTTATTTTATTTGCTCATGTTCTTGT
AAGTCATTCTTAATTGACCAATGATTGTAGACCTTGCTTGAGTATTTTTTCTAATAAAAACAAAGCAAATCACATT

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FIGURE 3504B

TAGCTTCAAATTGTAACAATTCAATTGAATTTTAAAATGACACCTGAAAAGATACATCTGATATTTTCTATATAG
AGCACAGTAAATAAGTTTTTTCATTGTGTAGAAATACTTAGATGTCAAAACCAGATTTCGTGATCCTTGATTAAAC
TTCTGAGTACTCAATCAATCATAATCCTTTTGCTGCTTATCTGATGTTGGTTTGATACTGTTAACACACCAAAAA
GAATATGGAATTGAAATGAGCTAGCTTTATAACTTGTATGTATACATATATACACATAACATCCAATTATGACTG
GGTAATAAGTGTGAAAATTTTAATTTGTGGTTTTTCATTTATTAATGTCTGCCCATCTGTATTGTTGCTCCTACCT
TCAAATATGACACCTGAAATAATAAGTCTGTTGTCCAGAATTT

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FIGURE 3505

MSSDGEPLSRMDESDSISSTIMDV DSTISSGRSTPAMMNGQGSTTSSSKNIAYNCCWDQCQACFNSSPDLADHIR
SIHVDGQGGVFVCLWKGCKVYNT PSTSQSWLQRHMLTHSGDKPFKCVVGGCNASFASQGGGLARHVPT HFSQQNS
SKVSSQPKAKEESPSKAGMNRRLKLNKRRRSLPRPHDFFDAQTLDAIRHRAICFNLSAHIESLGKGHSVVFHST
VIAKRKEDSGKIKLLLHWMPEDILPDVWVNESERHQLKTKVVHLSKLPKDTALLDPNIYRTMPQKRLKR

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FIGURE 3506A

CAAAAGAAAGGAAGAAAGTCACAAAGGGCTGTCTGAGGCACATGATTGTGAAGAGTTAAAGGGAAAAATCCATTCT
TCTGCTTTGTGAGAGCTCTCAAGCTAAAGTAAATGAGCCTTTAGAAGCCAAACATGCAGCTAACAAAGGTATGTA
TCCATGTCTGTGGACACTAGTTGAGATTTTGGTCCAGGAAAAGCTGAGGTTTGGTTGGGGGAGGGTGAAGCGAGG
AGGCCAAGAGCACCACCTGGCTGCACCCCGTCACCGGCGAGGCGGTGGTCACCGGACACCGGCGGCAGAGCACAG
CCTAGACGACCCTCGCGACCCCTAGAGTGGCGACGCTCCCTCCCTGAAACCTGGAGTCCTGAGTTTTTCCCTCCGC
GGCCGCTACTCACTCCCGGTGACCCCCAGCTGCCGTCTTGCCCCCAGCAATCTTCAGGCAGTCCTTACCCACT
CCCCCTCCCTGCAGCCCCGACCCCGATCGCCCCGCCGGGATAACCGTGGCAGTTGGCTTCTAAGAGGAATTATCCT
AGGAGAACAGACCACAGTTTTAGACACTTATAAACTTCTGCTTATATCATGCTTTCCCATGTGGTCCTGGTTGA
TGTATCAGATGGAAGGCAGATACGTTTAAAGTCATGAGCGAGATCCACCCATCCTCATGTATCAGTTACAAATGCA
CTGTCCTACCTGCGTTAGGACAAATGCACTAAAAGTGTATAAAGTCTTCAGAGGATATTGAGTTGTCATAGAACT
ACTTTCAGTCCGCTTTCCCAAAGGGAAATACATGATTGAGAGCAAATCATATAAATGGGTACACATCCATAATGA
AAGGAAAGTGACCTGCAAACATCCAGTCACAGGACAACCATCACAGGACAATTGATTTTTGTAGTGAATGAACA
GACTGTTGCAACCATGACATCTGAAGAAAAGAAGGAACGGCCAATAAGTATGATAAATGAAGCTTCTAACTATAA
CGTGACTTCAGATTATGCAGTGCATCCAATGAGCCCTGTAGGCAGAACTTCACGAGCTTCAAAAAAGTTTCATAA
TTTTGGAAAGAGGTCAAATTCATTAAAAGGAATCCTAATGCACCGGTTGTCAGACGAGGTGGCTTTATAAACA
GGACAGTACTGGCATGAAATTGTGGAAGAAACGCTGGTTTGTCCTTTCTGACCTTTGCCCTTTTATTATAGAGA
TGAGAAAGAAGAGGGTATCCTGGGAAGCATACTGTTACCTAGTTTTGAGATAGCTTTGCTTACCTCTGAAGATCA
CATTAAATCGCAAATATGCTTTTAAAGGCAGCCCATCCAAACATGCGGACCTATTATTTCTGCACTGATACAGGAAA
GGAAATGGAGTTGTGGATGAAAGCCATGTTAGATGCTGCCCTAGTACAGACAGAACCTGTGAAAAGAGTGGACAA
GATTACATCTGAAAATGCACCAACTAAAGAAACCAATAACATTCCCAACCATAGAGTGCTAATTAAACCAGAGAT
CCAAAACAATCAAAAAACAAGGAAATGAGCAAAATTAAGAAAAAAGGCATTAGAAGCTGAAAAATATGGATT
TCAGAAGGATGGTCAAGATAGACCCCTAACAAAAATTAATAGTGTAAAGCTGAATTCTCTGCCATCTGAATATGA
GAGTGGGTGAGCATGCCCTGCTCAGACTGTGCACTACAGACCAATCAACTTGAGCAGTTCAGAGAACAAAATAGT
CAATGTTAGCCTGGCAGATCTTAGAGGTGGAATCGCCCCAATACAGGGCCCTTATACACAGAGGCCGATCGAGT
CATACAGAGAACAATTCATGCAAGTGGAAACAGTGGATTAAATCCAGAAGGGGAGGGGTGATGAAGAAGA
AACCAGGGGAAATATGCCAAGTCACAGAGCCAGATTATGGCCCGCTACCCTGAAGGTTATAGAACACTCCCAAG
AAACAGCAAGACAAGGCCTGAAAGTATCTGCAGTGTAAACCCCTTCCACTCATGACAAGACATTAGGACCCGGAGC
GGAGGAGAAACGAGGTCCATGAGAGATGACACAATGTGGCAGCTCTACGAATGGCAGCAGCGTCAGTTTTATAA
CAAACAGAGCACCCTCCCTCGACACAGTACTTTGAGTAGTCCCAAAACCATGGTAAATATTCTGACAGACAAAT
GCACTCTATTCCACATACCTTCCACGGGTCAATAGTGTCTTATCAGGGATACTCCCTCAACGAACCTTACAG
ATCGGAAGTGTCTTACCAATTGAGAGGAGATGTGACAATAGCACCGCAGACACAGGGGCCCATCCCTAAGCC
AGAGGAGCTTACGCTGCTGCTAATAAAGCTGAGACGGCAGCAAGCCGAACCTGAGTAGTATCCGGGAGCATACGTT
AGCACAGCTCATGCAGCTAAAGCTTGAGGCCCCAGCCCCAAAGGTGGGAAGCCCTCCTGTGTGCTCCCGTGGCA
TCTGACCTCTGACACGTTGATGAATGATGATGAAGTGTGAAAAGAGATGGAACCTGCAATTGCAGTGATCATAT
TAGCATGCAAGTAATTAACAAGTTGCACCTGGTGAGTAGGAAGGCAGGCAGCCAGAGGCTCCAGAGCCATCAGAA
GGGCTGTGAGGGCACAAGACTGCCAAGAAAGAAGGAAAGTGACTGTCTACTGGAAGAATCTGTGCAGGCTCCATC
ACAGGCAGCTGCAGCTCTGTATGAGGGCTCTGGGGGAGCTGGGAACCTGTGCTTCTATGTGGGAACATGCTCCA
CTGTTTCCAGCTTTGTATAGAAATTTCTAATCATATAAATCTCAGTATTCTTGGACATCAAGGAAGTCTTATATT
TTTAAGCAACCCTGTCTGCTACCATCTTCCCAACAACCCACCACCATCTGTTTTGATGCCTACACAGAAGATAT
AAGCCAGTGGATCCTACATTTTTTTCAAGTATTTGCTGAAATACAAAGATTTATCAAATTTGCTAAGAAGCAGGG
CTCATTACAGGCTCGAGGACGCTCTTGATGTGAATTAACCCACAGGAGACTGATGCACAAAACAGAAATAGAGC
TTTATTTTACAATAAGAATTGTATACTGCCGAGAGGTGAGAGAAGGACAGTGGGAAAATCACATTCTCTGCTCA
AAGGCAGACTCTCCAGAAAGCCAGTTTACCGGGAACCTGAGGGGATAACGAGAACATACGGAGGCAGCAGCAGCGT
TGGCACCGCTACTGATGATGCTACCTATTGCACATCACCTTCACTGGGTACTCAGTCAGTAGTACCATGTGCAT
CTACATAGCTATCTCTCAGGTTCTCTTTGCATTCTCTATCCGTACTGCTGATTACATGGGCCCCAAGTGGACACTA
CATGTACATCGGGTACGAGCATCGATCCGTACACTGGCTGCCCTTGGAGCTGGCTTCTCTGACAAGACTCCTGC
TCACACTGTACCATGGCTTGTATCTCTGCCAACCAAGCCATGACCACAGGTGTATGCACTTTGGTCAGCAGAA
ACACAATACGAGCCTCTGGCTAGCTAAGGCACCTCTATTCTGAAAGTACGGAAAACATGCACGGTCAGATTTTGGC

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FIGURE 3506B

AAATTTTAAAGCCATGGATTCTGATTGGTTTGCAGAAAACCTACATGGGTAGAAAAACCAAGAAGTTTAATAACTG
GGGTGGATCTCTGTCCCTGGGACACCCATTTGGAGCCACTGGCTGCAGGTTGGTCATGGCTGCTGCAACAGATT
CGGAAAGAAGGAGGCCAAGGAAGTCTCCACGGTCCCTCATTACATCTTCACCATTTCTCAACACCCTCCAGGGCGT
CTTCATCCTATTGTTTGGTTGCCTCATGGACAGGAAGATACAAGAAGCTTTGCGCAAACGCTTCTGCCGCGCCCA
AGCCCCAGCTCCACCATCTCCCTGACTGATGGTGCATCTGCAATGTTAATCATGGCGGAGGAAAAGGCTCTGGC
CAGTGCGGTTATGAAGCCGGACGTTATTTTTGAGGGTAAAGTAAATGTTCAAACAAATCATCTCTGA

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FIGURE 3507

CTCTTTTTCCAGCTGGAACCATGGAGTGTGTAGAAGAGAAGAAGGTTCTTGCTGTGCCAGAAACCCTTAAGAAAA
AGCGAAGGAATTTTGCAGAGCTGAAGATCAAGCGCCTGAGAAAGAAGTTTGCCCAAAGACGCTTCGAAAGACAA
GGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAAGGAATACAGGCAGATGTACAGAACTGAAATTCGAA
AGGCGAGGATGGCAAGAAAAGCTGGCAATTTCTATGTACCTGCAGAACCCAAATTGGCATTGTGCGTCAGAATCA
GAGGTGTCAATGGCGTGAGCCCAAAGGTCCGAAAGGTGTTGCAGCTTCTTCGCCCTTCGTCAAATCTTCAATGGCA
CCTTTGTGAAGCTCGACAAGGCTTCGATTAAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGGTACCCCA
ATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGGCAAAATGAATAAGAAGCGAATTGCTTTGACAG
ATAACACTTTGATTGCTCGATCTCTTGGTAAATACGGCATCATCTGCATGGAGGATCTGATTCATGAGATCTATA
CTGTTGGAAAAGGCTTCAAAGAGGCAAATAACTTCCTGTGGGCCTTCAAATTGCTTCTCCACGAGGTGGAATGA
AGAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGGTCAACAGGCTTATTAGAA
GAATGAACTAAGGTGTCTACCATGATTATTTTCTAAGCTGGTCGGTTAATAAACAGTACCTGCTCTCAAA

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FIGURE 3508

MECVEEKKVLAVPETLKKKRRNFAELKIKRLRKKFAQKTLRKTRRKLIYEKAKHYHKEYRQMYRTEIRKARMARK
AGNFYVPAEPKLAFVVRIRGVNGVSPKVRKVLQLRLRQIFNGTFVKLDKASINMLRIVEPYIAWGYPNLKSVNE
LIYKRGYGKMNKKRIALTDNTLIARSLGKYGIICMEDLIHEIYTVGKGFKEANNFLWAFKLSSPRGGMKKKTTHF
VEGGDAGNREDQVNRLIRRMN

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FIGURE 3509

GATCCCAGAGGAGGAAGTCCAGAGACAGAGCACCATGACTTCTGAGAAAGGAGAAGAATCGAACCCTGGGAGTTT
GACGTCTTCTATGACCCCAGAGAACTTCGTAAAGAGGCCTGTCTGCTCTACGAAATCAAGTGGGGCATGAGCCCGG
AAGATCTGGCGAAGCTCAGGCAAAAACACCACCAATCACGTGGAAGTTAATTTTATAAAAAAATTTACGTCAGAA
AGAGATTTTACCCATCCATCAGCTGCTCCATCACCTGGTTCTTGTCCTGGAGTCCCTGCTGGGAATGCTCCCAG
GCTATTAGAGAGTTTCTGAGTCGGCACCCCTGGTGTGACTCTAGTGATCTACGTAGCTCGGCTTTTTTGGCACATG
GATCAACAAAATCGGCAAGGTCTCAGGGACCTTGTTAACAGTGGAGTAACTATTCAGATTATGAGAGCATCAGAG
TATTATCACTGCTGGAGGAATTTTGTCAACTACCCACCTGGGGATGAAGCTCACTGGCCACAATACCCACCTCTG
TGGATGATGTTGTACGCACTGGAGCTGCACTGCATAATTCTAAGTCTTCCACCCTGTTTAAAGATTTCAAGAAGA
TGGCAAAATCATCTTACATTTTTTCACTTTCATCTTCAAACTGCCATTACCAAACGATTCCGCCACACATCCTT
TTAGCTACAGGGCTGATACATCCTTCTGTGGCTTGGAGATGAATAGGATGATTCCGTGTGTGTACTGATTCAAGA
ACAAGCAATGATGACCCACTAAAGAGTGAATGCCATTTAGAATCTAGAAATGTTCAAGGTACCCCAAAACTCT
GTAGCTTAAACCAACAATAAATATGTATTACCTCTGGC

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FIGURE 3510

MTSEKGEEENPGSLTSSMTPENFVKRPVCSTKSSGA

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FIGURE 3511

GATCCCAGAGGAGGAAGTCCAGAGACAGAGCACCAATGACTTCTGAGAAAGGTCCTTCAACCGGTGACCCCACTCT
GAGGAGAAGAATCGAACCCCTGGGAGTTTGACGTCTTCTATGACCCAGAGAACTTCGTAAAGAGGCCTGTCTGCT
CTACGAAATCAAGTGGGGCATGAGCCGGAAGATCTGGCGAAGCTCAGGCAAAAACACCACCAATCACGTGGAAGT
TAATTTTATAAAAAAATTTACGTCAGAAAGAGATTTTACCCATCCATCAGCTGCTCCATCACCTGGTTCTTGTC
CTGGAGTCCCTGCTGGGAATGCTCCCAGGCTATTAGAGAGTTTCTGAGTCGGCACCCCTGGTGTGACTCTAGTGAT
CTACGTAGCTCGGCTTTTTTGGCACATGGATCAACAAAATCGGCAAGGTCTCAGGGACCTTGTTAACAGTGGAGT
AACTATTCAGATTATGAGAGCATCAGAGTATTATCACTGCTGGAGGAATTTTGTCAACTACCCACCTGGGGATGA
AGCTCACTGGCCACAATACCCACCTCTGTGGATGATGTTGTACGCACTGGAGCTGCACTGCATAATTCTAAGTCT
TCCACCCTGTTTTAAAGATTTCAAGAAGATGGCAAAATCATCTTACATTTTTTCAGACTTCATCTTCAAACTGCCA
TTACCAAACGATTCCGCCACACATCCTTTTAGCTACAGGGCTGATACATCCTTCTGTGGCTTGGAGATGAATAGG
ATGATTCCGTGTGTGTACTGATTCAAGAACAAGCAATGATGACCCACTAAAGAGTGAATGCCATTTAGAATCTAG
AAATGTTTACAAGGTACCCCAAACTCTGTAGCTTAAACCAACAATAAATATGTATTACCTCTGGC

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FIGURE 3512

MTSEKGPSTGDPTLRRRIEPWEFDVFYDPRELRKEACLLYEIKWGMSRKIWRSSGKNTTNHVEVNF IKKFTSERD
FHPSISCSITWFLSWSPCWECSQAIREFLSRHPGVTLVIIYVARLFWHMDQQNRQGLRDLVNSGVTIQIMRASEYY
HCWRNFBVNYPGDEAHWPQYPPLWMMLYALELHCIILSLPPCLKISRRWQNHLTFFRLHLQONCHYQTIPPHILLA
TGLIHPSVAWR

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FIGURE 3513

CCCGGATGTGGAGAAGCTGGGGAGAAGGCGTGGGAGGAAGATGGACTCGGTGGAGAAGGGGGCCGCCACCTCCGT
CTCCAACCCGCGGGGGCGACCGTCCCGGGGCCGGCCGCCGAAGCTGCAGCGCAACTCTCGCGGGCGGCCAGGGCCG
AGGTGTGGAGAAGCCCCCGCACCTGGCAGCCCTAATTCTGGCCCCGGGGAGGCAGCAAAGGCATCCCCCTGAAGAA
CATTAAGCACCTGGCGGGGGTCCCGCTCATTGGCTGGGTCTGCGTGC GGCCCTGGATTACAGGGGCCTTCCAGAG
TGTATGGGTTTTCGACAGACCATGATGAAATTGAGAATGTGGCCAAACAATTTGGTGCACAAGTTCATCGAAGAAG
TTCTGAAGTTTCAAAAGACAGCTCTACCTCACTAGATGCCATCATAGAATTTCTTAATTATCATAATGAGGTTGA
CATTGTAGGAAATATTCAAGCTACTTCTCCATGTTTACATCCTACTGATCTTCAAAAAGTTGCAGAAATGATTGCG
AGAAGAAGGATATGATTCTGTTTTCTCTGTTGTGAGACGCCATCAGTTTCGATGGAGTGAAATTCAGAAAGGAGT
TCGTGAAGTGACCGAACCTCTGAATTTAAATCCAGCTAAACGGCCTCGTCGACAAGACTGGGATGGAGAATTATA
TGAAATGGCTCATTTTTATTTTGCTAAAAGACATTTGATAGAGATGGGTTACTTGCAGGGTGGAAAAATGGCATA
CTATGAAATGCGAGCTGAACATAGTGTGGATATAGATGTGGATATTGATTGGCCTATTGCAGAGCAAAGAGTATT
AAGATATGGCTATTTTGGCAAAGAGAAGCTTAAGGAAATAAACTTTTGGTTTGCAATATTGATGGATGTCTCAC
CAATGGCCACATTTATGTATCAGGAGACCAAAAAGAAATAATATCTTATGATGTAAAAGATGCTATTGGGATAAG
TTTATTAAAGAAAAGTGGTATTGAGGTGAGGCTAATCTCAGAAAGGGCCTGTTCAAAGCAGACGCTGTCTTCTTT
AAAAGTGGATTGCAAAATGGAAGTCAGTGTATCAGACAAGCTAGCAGTTGTAGATGAATGGAGAAAAGAAATGGG
CCTGTGCTGGAAAGAAGTGGCATATCTTGGAATGAAGTGTCTGATGAAGAGTGCTTGAAGAGAGTGGGCCAAG
TGGCGCTCCTGCTGATGCCTGTTCTACTGCCCAGAAGGCTGTTGGATACATTTGCAAATGTAATGGTGGCCGTGG
TGCCATCCGAGAATTTGCAGAGCACATTTGCCTACTAATGGAAAAGGTTAATAATTCATGCCAAAAATAGAAATT
AGCGTAATATTGAGAAAAAATGATACAGCCTTCTTCAGCCAGTTTGCTTTTATTTTGGATTAAAGTAAATCCAT
GTTGTAATGTTACAGAGAGTGTGATTTGGTTTGTGATATATATATATTGTGCTCTACTTTTCTTTTACGCAAGA
TAATTATTTAGAGACTGATTACAGTCTTTCTCAGATTTTGTAGTAAATGCAAGTAAGAACATCATCAAAGTTCAT
TTGTATTGTACCCTGTAAAGTGTGTGTTTGTGTGCTTTCAAAGATGTTGGGATTTTATTTATCTGGGGACAGTG
TGTATGGTAAGACATGCCCTTCTATTAATAAAACTACATTTCTC

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FIGURE 3514

MDSVEKGAATSVSNPRGRPSRGRPPKLQRNSRGGQGRGVEKPPHLAALILARGGSKGIPLKNIKHLAGVPLIGWV
LRAALDSGAFQSVWVSTDHDEIENVAKQFGAQVHRRSSEVSKDSSTSLDAII EFLNYHNEVDIVGNIQATSPCLH
PTDLQKVAEMIREEGYDSVFSVRRHQFRWSEIQKGVREVTEPLNLPKRPRRQDWDGELYENGsfYFAKRHLI
EMGYLQGGKMAYYEMRAEHSVDIDVDIDWP IAEQRLRYGYFGKEKLKEIKLLVCNIDGCLTNGHIYVSGDQKEI
ISYDVKDAIGISLLKKSGIEVRLISERACSKQTLSSLKLDCKMEVSVSDKLAVVDEWRKEMGLCWKEVAYLGNEV
SDEECLKRVGLSGAPADACSTAQKAVGYICKNGGRGAIREFAEHICLLMEKVNNSCQK

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FIGURE 3515

TATAACATCTCCTGCTAAGCAAAGCCCACTGACTAATTAGTCACCACTACACAAGGAAAAACAGCATTATTTT
GAGGCTGAATTAATGTTAGTTTTCTCATTTTCTCATCTTCATTCTCTGCTGTTGAAGAAATGTTGAGTGGCCA
ACTGATTCTGCTTCTTCTCTTGCAGGTTTCTATCTCTGGGAGCAGGAGAGTGTGCCTATTTGAATGACAAAGGTG
CCAGTAGTGCCAGGCACTACACAGAGAGGAAGTGGATTTGTTCCAAATCAGATATACATGTCTAGATGTTACAGC
AAAGCCCCAACTAATCTTTAGAAAGCATATTGGAAGTGAATACTCCATTTTAAAATGAGCAAAGAATTTATTTCTT
ATACCAACAGGTATATGAAAATATGCTCAATATCACTAATAACTGGGAAAATACAAATCAAAATCATAGTAAAAT
ATTACCTGTTTTTCATGGTGCTAATATTACCTGTTCTCCCACTGCTAATGACATACCCGAGACTGAGTAATTTATA
AATAAAAGAGATTTAATTGACTCATAGTTCCACATGGCTGGGGAGGTCTTGCAATCATGACAGAAGGCCAAATGGG
AAGCAAAGTCATGCTTATGTGGTGGCAGGCAGGGGGACTTGTGCACAGGAACCTCTATTTATACAACCATCAGA
TATCTTGAGACAAGAACAGTATGGGGCTCCCTGGTGTGATTCCGTCCTGCGCGGCTGTTCTCTGGAGCAGCATTC
ATTTATCTTCGTCCTGCTTGTCTCCTACCTAAGTGTGTGTCGCCACCCGATGGAAGATTGATGGACATGGACAT
GAGCCCCCTGAGGCCCCAGAAGTATCTTTTTCAGTTGTGAAGTAAAGGCCGACAAAGATGATCACTTTAAGGTGGA
TAATGATGAAAATGAGACCAGTTATCTTTAAGAACGGTCAGCTCAGGGGCTGGTGCAAAGGATGAAGTGCACATT
GTTGAAGCAGAGGCCATGAATGACGAAGGCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAG
CCAACGGTTTTCTCTTGGGGGCTTTGAAATAACACCACAGTGGACTTAAGGTTGAAGTGTGGTTCAGGGCCAGTG
CATATTAGTGGACAGCACTTAGTAGCTGTGAAGGAAGGTGCAGAGTCAGAAGATGAAGAAGAGGAGGATGTGAAA
CTCTTAAGTATATCTGGAAGCAGTCTGCCCCCTGGAGGTGGGCAGAAAAAGTAAACTTGTCTGCTGCTGCTGAT
GATGATGATGATGAAGATGATGATGATGATGATGACGAGGAAGCTGAAGAAAAAGCGCCAGTGAAGAAATCTATA
CGAGATACTCCAGCCAAAAATGCACAAAAGTCAAATCAGAATGGAAAAGACTCAAAACCATCATCAACACCAAGA
TCAAAAGGACAAGAATCCTTCAAAAAACAGGAAAAATCTCCTAAACACCAAAAGGATCTAGTTCTGTAGAAGAC
ATTAAAGCAAAAATGCAAGCAAGTATAGAAAAACGTGGTTCTCTTCCCAAAGTGGAAACCAAGTTCATCAATTAT
GTGAAGAATTTCTTCTGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAGTCTCTTTAAGAA
AATAGTTTAAACAATTTGTTAAAAATTTTCCATCTTATTTTCAATTTCTGTAACAGTTGATATCTGGCTGTCTTTT
TATAGTGCAGAGTGAGAACTTTCCCTACCATGTTTGATAAATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGT
CCAAAATGCCTGTTTAGTTTTTAAAGATGGAAGTCCACCCTTTGCTTGGTTTTAAGTATGTATGGGATGCTATGA
TAGGACATAGTAGTAGCAGTGGTCAGACATGGAAATGGTGGGGAGACAAAAGTATACACGTGAAATAAAACTCAG
TATTTTAATAAAGTAAAAAAA

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FIGURE 3516

MNDEGSPIKVTLATLKMSVQPTVSLGGFEITPPVDLRLKCGSGPVHISGQHLVAVKEGAESEDEEEEDVKLLSIS
GKQSAPGGGQKKVKLAAAADDDDEDDDDDDDEEAEEKAPVKKSIRDTPAKNAQKSNQNGKDSKPSSTPRSKGQE
SFKKQEKSPKTPKGSSSVEDIKAKMQASIEKRGS LPKVETKF INYVKNFFWMTDQEAIQDLWQWRKSL

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FIGURE 3517

GGCGCCGGGGGACACGTTGGCTGCGTTTTTCGGCGGGCCTCCCGGGTACAAAAATGGCTGTGGCTAGCGATTTCTA
CCTGCGCTACTACGTAGGGCACAAGGGCAAGTTTTGGGCACGAGTTTCTGGAGTTTCGAATTTTCGGCCGGACGGAAA
GCTTAGATATGCCAACACAGCAATTACAAAAATGATGTGATGATCAGAAAAGAGGCTTATGTGCACAAGAGTGT
AATGGAAGAACTGAAGAGAATTATTGATGACAGTGAAATTACAAAAGAAGATGATGCTTTGTGGCCTCCCCCTGA
TAGGGTTGGCCGACAGGAGCTTGAAATTGTAATTGGAGATGAGCACATATCTTTTACCACATCAAAAAATAGGTTT
TCTTATTGATGTAAATCAGTCAAAGGATCCTGAAGGCCTTCGAGTATTTTACTATTTGGTACAAGACTTGAAATG
TTTAGTTTTTTCAGTCTTATTGGATTACACTTCAAGATTAAACCAATTTAAATTGTATGTTTTTTCAGGCTGTTTGTAT
ATTTAATTAAGGGATGGGAGGGGTATTTTGTCAATTTACAGTATTGGGGTTTTTATGAATGTGAAGCAAAACAAAA
AAATTTGTATGTAACTGAAAAATAAGAAAATACATTAGCAAGCTTAATGGTTATCCTTACTTGAGTCCACATGGG
TTGGACAGTCCCCACACACATTAAATTTCTGTAAATGAAAGCCACCTTTTGTAAAAATTTGCTCTAATAAAACAT
ACCAAATCCTGGTTGCAGAGTAGTTTTTTGTTTTTCCAGGAGGCTATGTCTCTAATTCACTTTAGAGATAATAA
GAAATTGTTCTGGTAGATACATCCTGTGACAGAAGATACCTTAGGTGGAAGTATGTAGCCAGATTCCCATCCATG
AAAGGCAAGTGTAGATTGTCCCTTATTTCCCTTCATACATGATTGGATTTAATTTGGGGGGCTTATACAAGGTCT
AGTTTTTTTTTACAGTTATGACAAACCCCTCAGGGATTATTCACATTTAAATATTTTTCAGTTACAAGCAGTGAGG
TCCTAAAGTGTACAAAGAGTACAGTCTACCCCATGTTAGGCATATCTTTGATTATGTCTTTATTCCTTATTTTAC
AATGTATTTGGTGTGTAGGGGAGGGGGGAGAACTAAATGAGTTTTTTCAGCTTTATAAATTGTTAAACATTTAGACA
AACATATATGTATGTATGAATGTACATAAATATTTTTTAACTCCTATTGACCACGAGTCTCACTTCAGTTTCCCAG
TTCTTTTCAACCTCTTTCTGATAGATTTCTCTTTTCACTTTTAGTAACCATGTTCTTGTTCCTTTTATTC
TTCCATCTGAAGCCCCACTCTTAAAAAGTTGCACTGTTCCAGTAGTTATAATCCACTTGCCCTAGGAACAAGTTA
GCACTGAATTTTGGGTGGAATAATTAGTTTTCTGAAGGCTTGCCAGGACCCCTGAGCAGGTAGGCTCTAGAGTCGG
GCAGTCCAATAACTTTTTTGCAATAATGGAAACGTCCTATGTGCAGTCCAATAGGGTAGCAACTGGCCAAATGAG
GCCTACTGATTACTTGAGGTGTGCCTTGTATAACTGAATTTATGGTGCTATTTAAACAATTTTTTCTAACGTGA
AAAGGATAAAACATAAAAAACTCTTGAGAACTATAAAGTGAACACCTATATGCCTACCCCTACCTAGATTCTATA
CTTAACATCTTTTTTACTGTAATATCTCTATTATAATAAATCTTGGTTTTTCACTTAACTGGTGTAAATGGTGCC
AATAAACTACTTTTTTGTAGTGCTATTTAATTTTGATTAAATTTAGATAGCCACGTGTCTAGCGGCTACCGTTT
GGACAGTATAGCTCTAGAGCATGGCTTGTAACCTGTTTGCCATGGAGCACTAGATGGTCCTTTTCACTCCTCAA
AATGCATGCCCATTGCCTTCAGGTTTGCCATGGAAAGTCAAATGATTCCACTTCATTATGCAAGTACGCTATCA
TCTTCAGGTCTTTTGTATGTAAAATGTTTCTGTTCCAGTTGTAGACCTTGATGATTGTGCAGTATGAAATCGTAT
TGTAATTTTCTTGCATTTAGATGTCAACCTCAGAAACAGGAACAATCGTCTTTTGAACCTCCAGTAGGCCACAG
TTGTTGGTTGTTTCTCAAAACAGGTTGTGGCTCCTGTTGAATAAGATGATCCATTAAAAACTGAACAAGGTTGAG
GAGAAATAGTGCTTACGTTGAAAAATCTTTAAGTCTTTGTCCCCGTCTCTAACTTCCTTACGTTTTTCGTTTTATT
TAGCTCCATCCCCACTATCTACTAGAATTTCTCATATTTAAACCAAGATGGGAGACTAGGTCAATAGGAAAATAT
TACCGTCTACAATTTTCTTATACTTTGATCTGTCTTTTATTTGATTGTAAGTTGCTGATGGACAGTGATCATTAG
AAACTGAATTTTGTATAATACTAGTTTTATATGAACTAGATATTTATTGCGCTCAGGTTATGTTCTTTTACCT
CCTTCCTTAATAAAGAGACCACTTGAAAT

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FIGURE 3518

MAVASDFYLRYYVGHKGKFGHEFLEFEFRPDGKLRVYANNNSNYKNDVMIRKEAYVHKSVMEELKRIIDDSEITKED
DALWPPPDRVGRQELEIVIGDEHISFTTSKIGSLIDVNQSKDPEGLRVFYLVQDLKCLVFSLIGLHFKIKPI

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FIGURE 3519

AAAACTTGTGCGGGGCCATTTTTGGGGCAGTAAGATCGAGCGAGGAGCCCAAGAGAGAGCGCGCAGCACGAAGC
TCGAGCCGCTCCGCGCGCGACCCACCTCGGCCGCGCGCCTGCGCCGCGAGATCCGCCCCGGCTCCCCGA
GAGCGAGCCCCGGCCGCGCGACCAACAGCCGCGCTAACCGCCGACCAACCGCCACCGAGGCGCTGAGCGAGAG
CAGAGGAGGAGGAGGCATGAGTGAGGCGGGCGAGGCCACCACCACCACCACCACCCTCCCGCAGGCTCCGAC
GGAGGCGGCGCGCGGCTCCCCAGGACCCGCGCCCAAGAGCCCGGTGGGCAGCGGTGCGCCCCAGGCCGCGGC
CCCGGCGCGCGCGCCACGTGCGAGGAAACCCCGGTGGGGACGCGGCCCGCGCAGCCACGGGCACCGCGCGCGC
CGCTCTTTAGCCACCGCGCGCGCGCAGCGAAGACGCGGAGAAAAAGTTCTCGCCACCAAGTCTTGGCACTGT
CAAATGGTTCAACGTGAGAAATGGATATGGATTTATAAATCGAAATGACACCAAGAAGATGTATTTGTACATCA
GACTGCCATCAAGAAGAATAACCCACGGAATATCTGCGCAGTGTAGGAGATGGAGAACTGTAGAGTTTGATGT
GGTTGAAGGAGAGAAGGGTGAGAAGCTGCCAATGTGACTGGCCCGGATGGAGTTCTGTGGAAGGGAGTCGTTA
CGCTGCAGATCGGCGCCGTTACAGACGTGGCTACTATGGAAGGCGCCGTGGCCCTCCCCGGAATGCTGGTGAGAT
TGGAGAGATGAAGGATGGAGTCCCAGAGGGAGCACAACTTCAGGGACCGGTTTCATCGAAATCCAACTTACCGCCC
AAGGTACCGTAGCAGGGGACCTCCTCGCCCACGACCTGCCCCAGCAGTTGGAGAGGCTGAAGATAAAGAAAAATCA
GCAAGCCACCAAGTGGTCCAAACAGCCGTCTGTTGCGCGTGGATACCGGCGTCCCTACAATTACCGGCGTCGCCC
GCGTCTCTTAACGCTCCTTCACAAGATGGCAAAGAGGCCAAGGCAGGTGAAGCACCAACTGAGAACCCTGCTCC
ACCCACCCAGCAGAGCAGTGCTGAGTAACACCAGGCTCCTCAGGCACCTTCACCATCGGCAGGTGACCTAAAGAA
TTAATGACCATTGAGAAATAAAGCAAAAAGCAGGCCACAACCTTAACCAACACCAAGAAACATCCAAGCAATAA
AGTGGAAGACTAACCAAGATTGGACATTGGAATGTTTACTGTTATTCTTTAAGAAACAACTACAAAAAGAAAAT
GTCAACAAATTTTCCAGCAAGCTGAGAACCCTGGGAATTCCTGCACGGAAGACAAGAGAGTAGCCTCTCCAGTTT
CAGCAACCGCTAGGTTTCTATTTTTTTTCTGGTTTTTACTGTTTTGGTAATATATATATTGAAACAAGAAATAT
TAATACCACATGGGGAGAACCCCAACCAAGAAATCTGAAATATATAGTAAATGCTTTTTTTTCCGTTTTTGTTC
ATTTTGGATGCTGGTGCTAAACCTCCAAGTGTCATGATTTAAAAAATTTATGTCCTTCTTATTTATT
TCTAGGATGAGGGGAGGATAACATTTTGTCTTTCTTATGTGACTCTCTTTGAAAATGTGCAGTAAGAAATTCCTC
AAAAATAAAATTTTTTACCCTTCAGAGG

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FIGURE 3520

CAGAGCCTCCTTCAAGATGCTGCTGGTCCTGCTCTCAGTGGTCCTTCTGGCTCTGAGCTCAGCTCAGAGCACAGA
TAATGATGTGAACCTATGAAGACTTTACTTTTACCATAACCAGATGTAGAGGACTCAAGTCAGAGACCAGATCAGGG
ACCCACAGAGACCTCCTCCTGAAGGACTCCTACCTAGACCCCCCTGGTGATAGTGGTAACCAAGATGATGGTCCCTCA
GCAGAGACCACCAAAACCAGGAGGCCATCACCGCCATCCTCCCCACCTCCTTTTCAAAATCAGCAACGACCACC
CCAACGAGGACACCGTCAACTCTCTCTACCCCGATTTCTTCTGTCAGCCTGCAGGAAGCATCATCATTCTTCCG
GAGGGACAGACCAGCAAGACATCCCCAGGAGCAACCACTCTGGTAACTCTAGAATTCAGTGGCAGAAAATAAATAA
GAAGATAACTTCCTTCAGAAAGCCATGACATTGAAATAATGTGGTCATAACTCTTTC

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FIGURE 3521

MLLVLLSVVLLALSSAQSTDNDVNYEDFTFTIPDVEDSSQRPDQGPQRPPPEGLLPRPFGDSGNQDDGPPQRPPK
PGGHRHPPPPPFQNRPPQRGHRQLSLPRFPSVSLQEASSFFRRDRPARHPQEQLW

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FIGURE 3522

GGGGGGGGGAGCACAAAGTTGGGAGTGACACCAGAGCCTCCTGCAAGATGCCTTCTGATTCTGCTGTCAGTGGCCC
TGCTGGCCTTCAGCTCAGCTCAGGATTTAAATGAAGATGTCAGCCAGGAAGATGTTCCCTCGTAATATCAGATG
GAGGAGACTCTGAGCAGTTCATAGATGAGGAGCGTCAGGGACCACCTTTGGGAGGACAGCAATCTCAACCCTCTG
CTGGTGATGGGAACCAGGATGATGGCCCTCAGCAGGGACCACCCCAACAAGGAGGCCAGCAGCAACAAGGTCCAC
CACCTCCTCAGGGAAAGCCACAAGGACCACCCCAACAGGGAGGCCATCCCCCTCCTCCTCAAGGAAGGCCACAAG
GACCACCCCAACAGGGAGGCCATCCCCGTCTCCTCGAGGAAGGCCACAAGGACCACCCCAACAGGGAGGCCATC
AGCAAGGTCTCCCCCACCTCCTCCTGGAAAGCCCCAGGGACCACCTCCCCAAGGGGGCCGCCACAAGGACCTC
CACAGGGGGCAGTCTCCTCAGTAATCCAGGATTCAATGACAGGAAGTGAATAAGAAGATAACAGTGTTTCAAATGC
CGTGAAACATGGCATCATGCTCTAACTTCAGTATACCAATAAAACAATCAGCTTGCAATTC

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FIGURE 3523

MLLILLSVALLAFSSAQDLNEDVSQEDVPLVISDGGDSEQFIDEERQGPPPLGGQQSQFSAGDGNQDDGFPQQGFPQ
QGGQQQQGPPPPQGKPGGPPQQGGHPPPPQGRPQGFPQQGGHPRPPRGRPQGFPQQGGHQGGPPPPPPGKPGGPP
PQGGRPQGPPQGQSPQ

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FIGURE 3524

TGCAGGGGGGGGAAAAGTTGGGAGTGACACCAGAGCCTTCTGCAAGATGCTTCTGATTCTGCTGTCAGTGGCCC
TGCTGGCCTTCAGCTCAGCTCAGGACTTAGATGAAGATGTCAGCCAAGAAGACGTTCCCTTGGAATATCAGATG
GAGGAGACTCTGAGCAGTTCATAGATGAGGAGCGTCAGGGACCACCTTTGGGAGGACAGCAATCTCAACCCCTCTG
CTGGTGATGGGAACCAGAATGATGGCCCTCAGCAGGGACCACCCCAACAAGGAGGCCAGCAGCAACAAGGTCCAC
CACCTCCTCAGGGAAAGCCACAAGGACCACCCCAACAGGGAGGCCATCCCCCTCCTCCTCAAGGAAGGCCACAAG
GACCACCCCAACAGGGAGGCCATCCCCGTCCTCCTCGAGGAAGGCCACAAGGACCACCCCAACAGGGAGGCCATC
AGCAAGGTCTCCCCACCTCCTCCTGGAAAGCCCCAGGGACCACCTCCCCAAGGGGGCCGCCACAAGGACCTC
CACAGGGGCAGTCTCCTCAGTAATCTAGGATTCAATGACAGGAAGTGAATAAGAAGATGACAGTGTTCAAATGC
CTTGAAACATAATGTGATCATGCTCTAACTTCAATATACCAATAAAATAATCAGCTTGC

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FIGURE 3525

MLLILLSVALLAFSSAQDLDEDVSQEDVPLVISDGGDSEQFIDEERQGPFPLGGQQSQPSAGDGNQNDGPQQGPPQ
QGGQQQQGPPPPQGKPGPPQQGGHPPPPQGRPGPPQQGGHPRFPRGRPGPPQQGGHQGGPPPPPPGKPGPP
PQGGRPGPPQGQSPQ

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FIGURE 3526

CCTCTAGCCCTCCCTGCGTTTAGATTTCAGTTGCACCTTTTATTATTTTAACTCTTCTCCTTAGGACACGCAGCCC
CCAATTTGTCCCTCCGCTGGGCGGCCCTGGTCCCGCGCGCCAGCATGGGAGAGCGAGGGACCTGCCCCGCGGCC
CGCCGGCGTGTGCAAGGAGGTCCAGCCGCCGCGCCCGCTACCCGGAGTCTGAGGACGGGTGTCCAGGGACGGAGA
GGCAGGTGAGAGGGAGGTGGCTAAGCTGGCTATGGTGACAGGACGATGTTGGCCAGAAAGAGTATCATCCCCGAG
GAGTATGTGCTGGCGCGCATCGCCGCAGAGAACCTGCGCAAGCCGCGCATCCGAGACCGCTCCCCAAAGCCCGC
TTCATCGCCAAGAGCGGGGCTGCAACCTGGCGCATAAGAACATCCGTGAGCAAGGACGCTTCTACAGGACATC
TTCACCACCTTGGTGGACCTGAAATGGCGCCACACGCTGGTTCATCTTTACCATGTCCTTCTCTGCAGCTGGCTG
CTCTTCGCTATCATGTGGTGGCTGGTGGCCTTTGCCCATGGGGACATCTATGCTTACATGGAGAAAAGTGAATG
GAGAAAAGTGGTTTGGAGTCCACTGTGTGTGTGACTAATGTCAGGTCTTTCACCTTCTGCTTTTCTCTTCTCCATT
GAAGTTCAAGTTACCATTGGGTTTGGAGGGAGGATGATGACAGAGGAATGCCCTTTGGCCATCACGGTTTTGATT
CTCCAGAATATTGTGGGTTTGTATCATCAATGCAGTCATGTTAGGCTGCATTTTTCATGAAAACAGCTCAGGCTCAC
AGAAGGGCAGAACTTTGATTTTCAGCCGCCATGCTGTGATTGCCGTCCGAAATGGCAAGCTGTGCTTCATGTTT
CGAGTGGGTGACCTGAGGAAAAGCATGATCATTAGTGCTCTGTGCGCATCCAGGTGGTCAAGAAAACAACATA
CCTGAAGGGGAGGTGGTTCTTATTCACCAACTGGACATTCCTGTTGATAACCCAATCGAGAGCAATAACATTTTT
CTGGTGGCCCCCTTTGATCATCTGCCACGTGATTGACAAGCGCAGTCCCTGTATGACATCTCAGCAACTGACCTG
GCCAACCAGACTTGGAGGTCATAGTTATTCTGGAAGGAGTGGTTGAAACTACTGGCATCACACACAAGCACGA
ACCTCCTACATTGCTGAGGAGATCCAATGGGGCCACCGCTTTGTGTCCATTGTGACTGAGGAAGAAGGAGTGTAT
TCTGTGGATTACTCCAAATTTGGCAACACTGTTAAAGTAGCTGCTCCACGGTGCAGTGCCCCGAGAGCTGGATGAG
AAACCTTCCATCCTTATTCAGACCCCTCCAAAAGAGTGAAGTGTCTCATCAAAATTCTCTGAGGAAGCGCAACTCC
ATGAGAAGAAACAATTCCATGAGGAGGAACAATTCTATCCGAAGGAACAATTCTTCCCTCATGGTACCAAAGGTG
CAATTTATGACTCCAGAAGGAAATCAAAACACATCGGAATCATGACAGCAAGATAACCCCAAGACAGTCTTTTAT
CAAGTTTTGACGGTTTATGCTGGGCACTGCCAGACTGAACCAGAGCTGGAACACAATAATGTGTCTTCTACATT
TTATTACACTAAATGATATTCAATTCAAGCAACAGCACTTTCTGTAGTAATAAAAAGTAACACACCAAGTGGAG
GATTCATGGCTTATGCTTGTTT

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FIGURE 3527

MLARKSIIPEEYVLARIAAENLRKPRIRDRLPKARFIAKSGACNLAHKNIREQGRFLQDIFTTLVDLKWRHTLVI
FTMSFLCSWLLFAIMWWLVAFAGDIYAYMEKSGMEKSGLESTVCVTNVRSTSAFLFSIEVQVTIGFGGRMMTE
ECPLAITVLILQNIIVGLIINAVMLGCIFMKTAQAHRRAETLIFSRHAVIAVRNGKLCFMFRVGD LRKSMIISASV
RIQVVKKTTTTPEGEVVP IHQLDIPVDNPIESNNIFLVAPLIICHVIDKRSEPLYDISATDLANQDLEVIVILEGVV
ETTGITTQARTSYIAEEIQWGHFRFVSIVTEEEGVYSVDYSKFGNTVKVAAPRCSARELDEKPSILIQTLQKSELS
HQNSLRKRNSMRRNNSMRRNNS IRRNNS SLMVPKVQFMTPEGNQNTSES

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FIGURE 3528

GCCGGAGGAGACGCACGCAGCTGACTTTGTCTTCTCCGCACGACTGTTACAGAGGTCTCCAGAGCCTTCTCTCTC
CTGTGCAAAATGGCAACTCTTAAGGAAAACTCATTGCACCAGTTGCGGAAGAAGAGGCAACAGTTCCAAACAAT
AAGATCACTGTAGTGGGTGTTGGACAAGTTGGTATGGCGTGTGCTATCAGCATTCTGGGAAAGTCTCTGGCTGAT
GAACTTGCTCTTGTGGATGTTTTGGAAGATAAGCTTAAAGGAGAAATGATGGATCTGCAGCATGGGAGCTTATTT
CTTCAGACACCTAAAATTGTGGCAGATAAAGATTATTCTGTGACTGCCAATTCTAAGATTGTAGTGGTAACTGCA
GGAGTCCGTGAGCAAGAAGGGGAGAGTCGGCTCAATCTGGTGCAGAGAAATGTTAATGTCTTCAAATTCATTATT
CCTCAGATCGTCAAGTACAGTCCTGATTGCATCATAATTGTGGTTTTCCAACCCAGTGGACATTCTTACGTATGTT
ACCTGGAAACTAAGTGGATTACCCAAACACCGCGTGATTGGAAGTGGATGTAATCTGGATTCTGCTAGATTTTCGC
TACCTTATGGCTGAAAACTTGGCATTTCATCCAGCAGCTGCCATGGATGGATTTTGGGGGAACATGGCGACTCA
AGTGTGGCTGTGTGGAGTGGTGTGAATGTGGCAGGTGTTTCTCTCCAGGAATTGAATCCAGAAATGGGAACTGAC
AATGATAGTGAATTTGGAAGGAAGTGCATAAGATGGTGGTTGAAAGTGCCTATGAAGTCATCAAGCTAAAAGGA
TATACCAACTGGGCTATTGGATTAAAGTGTGGCTGATCTTATTGAATCCATGTTGAAAAATCTATCCAGGATTCAT
CCCGTGTCAACAATGGTAAAGGGGATGTATGGCATTGAGAATGAAGTCTTCCTGAGCCTTCCATGTATCCTCAAT
GCCCCGGGATTAACCAGCGTTATCAACCAGAAGCTAAAGGATGATGAGGTTGCTCAGCTCAAGAAAAGTGCAGAT
ACCCTGTGGGACATCCAGAAGGACCTAAAAGACCTGTGACTAGTGAGCTCTAGGCTGTAGAAATTTAAAAACTAC
AATGTGATTAACTCGAGCCTTTAGTTTTTCATCCATGTACATGGATCACAGTTTGCTTTGATCTTCTTCAATATGT
GAATTTGGGCTCACAGAATCAAAGCCTATGCTTGGTTTTAATGCTTGCAATCTGAGCTCTGAACAAATAAAATTA
ACTATTGTAGTGTG

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FIGURE 3529

ATTTCAGTAAACCACTGGGAGTCCGGCAGCATGGAGGCAGCGCGCCCTCCCCGACGGCAGGGAAGTTTCGTGGTGG
TCGGCGGGCGGCATCGCGGGCGTCACTTGTGCGGAGCAGTTGGCTACTCACTTTCATCGGAAGATATTCTCTTGG
TAACAGCTTCTCCTGTTATTAAAGCAGTTACAAATTTCAAGCAGATTTCTAAAATATTGGAAGAATTTCGATGTTG
AAGAACAATCAAGTACCATGTTAGGAAAACGCTTTCCCAACATTAAGGTTATAGAATCTGGCGTAAAGCAACTGA
AGAGTGAAGAACACTGCATTGTAACAGAAGATGGCAATCAGCACGTATATAAGAACTCTGTCTGTGTGCTGGAG
CTAAACCAAAGTTGATATGTGAAGGAAATCCTTATGTATTAGGAATCCGTGATACAGACAGTGCTCAGGAATTTT
AGAAACAGCTTACTAAAGCTAAAAGATAATGATCATAGGGAACGGTGGTATTGCACTTGAGTTAGTGTATGAAA
TTGAAGGCTGTGAAGTGATTTGGGCCATTAAAGATAAAGCTATAGGGAATACTTTCTTCGATGCAGGAGCAGCTG
AATTCCTGACTTCAAAGCTCATTGCTGAAAAATCAGAGGCTAAAAATTGCACATAAAAGAACCAGATATACAACTG
AAGGAAGGAAAAAGGAAGCTAGAAGCAAATCTAAAGCAGATAATGTAGGAAGTGCAATTGGGACCAGATTGGCATG
AAGGCTTGAATCTTAAAGGAACAAAGAGTTTTCTCATAAGATTACCTTGAACTATGTGTGAAGTAAAGAAAA
TCTACCTTCAGGATGAGTTTGAATTTTGAAGAAAAAGTCCTTCACTTTTCCAAGAGACCATAAGTCAGTTACAG
CTGATACAGAGATGTGGCCTGTCTATGTGGAATTGACCAATGAAAAGATATATGGCTGCGATTTTATTGTGCTAGT
CTACAGGAGTTACACCAAATGTAGAACCTTTTCTCCATGGTAACAGTTTTGATCTAGGAGAAGATGGTGGCCTGA
AAGTGGATGATCATATGCACACATCCCTTCTGATATCTATGCTGCCGGTGACATCTGTACTACATCCTGGCAGC
TGAGCCCAGTCTGGCAGCAGATGAGGCTGTGGACCCAGGCTAGACAGATGGGATGGTATGCAGCAAAGTGCATGG
CTGCAGCGAGTTCAGGAGACTCTATTGACATGGATTTTCACTTTTGAAGTGTGCTCATGTGACAAAATTTTTTA
ACTATAAGGTTGTACTGCTGGGAAAAATACAATGCACAGGGCTTAGGTTTCAAGATCATGAATTAATGCTGAGATGTA
CCAAAGGACGAGGAATACATCAAAGTCGTCATGCAAAATGGACGAATGATGGGAGCTGTCTTAATTGGTGAAAACC
GATTTAGAAGAAACATTTGAAAACCTAATCTTAAACCAAATGAATCTTTCATCATATGGAGAAGATCTGCTAGAT
CCAAATATTGATATAGAAGATTATTTTGAATAAAATGGAATTTCTTCAGGAATCATATAAAGTTCCAAATGACA
CCAGAAAAATCACAAGTCAATAAAATGAATGACTGTATTGAGTTAATGATGACCACACTGAAAATTACAGAAGTG
ATAATGATATTTCGTGGAAAAATATAAAACATAAATCTAAGTTTGAATCAGTTCAAAGTTTATTTATAGATAT
ATCTTTCCAACACAACACTGACCGCTTAGATAAAAAATCTTAAGTTATTTATTTCTGTGTTTTAAACATAAATATG
TTTACTTGTGATTTAGCTTTGGAGCAAATTTAGGTAAGTTATCTACTTAGCCAAATGTACTCTAGTAGACTAGAA
CCATTCTTTGTGAAATGTCAAAATATGGCTATGGTTTTCAGGAACCTTTAAATCGGTTGTATTTTACTTTAAATAG
AGATGTAGCAATATCTCGTTTGCTAATATTTATATTGATGACTTACTCCTTTTTTGTGTAATTGTACTTCTGGTT
TTATAACCTGAAATCATCTACAAGCTTGTCCAACCTTAGCCACGGGTCTAATGCAGCCAGAACAGCTTTGAAT
GCAGCCCAACACAAATCTGTAAACCTTTCTTAAACATGAGATTTTTCTTGCAATTTTTTTTTTTTTTAAGCTCATC
AGCTATCGTCAGTGTTAGCATATTTTATGTGCGGCCCAAGACAATCTTCTTCCAATGTGGCTCAGGGAAGCCAA
AAGATTGGACATCCCTGATCTACATATTTAACTTAAAGTATCACTCAGTGAACCTCTGTGAGTATAATATTGCTT
TCAAAAAGATGGTTATGTCAAAAGAAAAAATATAGCTAAGTATATAAAGGCATAAAAAACTTAAGACAATTACAT
GAACTTATTCTCAAATATTTTACATTTTTTGTAAACCTTTCTTAAACATGAGATTTTTCTTGCAATTTTTTTTTT
AAGCTCATCAGCTATCATCAGTGTTAGCATATTTTATGTGCGGCCCAAGACAATCTTCTTCCAATGTGGCTCAG
GGAAGCCAAAAGATTGGACATCCTTGATCTACATATTTAACTTAAAGTATCACTCAGTGAATTTCTTTAAAAAC
TATTGTCTAACTACAAAAATAATGGCATATACATGCATAAACCATCTTAAATTAGAAAATTTAGTAACAGTCATA
TCAGGCATCATCGATTTTTCTTTTCTTAGCTCCTGTATTCTTAGAACCAGATTGCTGAAGCATGTTTGCAGCCTT
CTTCTGGAAGTTGCCTGAATTTTTTCTCCTCATCTTTTTATCACCTTGTTGAGAATGACAAGTTTGAAGCATT
AGCCTACAAAAA

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FIGURE 3530

MEARPPPTAGKFVVVGGIAGVTCAEQLATHFPSEDILLVTASPVIAVTFNKQISKILEEFDVEEQSSTMLGK
RFPNIKVIESGVKQLKSEEHCIVTEDGNQHVYKKLCLCAGAKPKLICEGNPYVLGIRDTSAQEFQKQLTKAKRI
MIIGNGGIALELVYEIEGCEVIWAIKDKAIGNTFDAGAAEFLTSKLI AEKSEAKIAHKRTRYTTEGRKKEARSK
SKADNVGSALGPDWHEGLNLKGTKEFSHKIHLETMCVKKIYLQDEFRIKKKSFTFPRDHKSVTADTEMWPVYV
ELTNEKIYGCD FIVSATGVTPNVEPFLHGNSFDLGEDGGLKVDDHMHTSLPD IYAAGDICTTSWQLSPVWQOMRL
WTQARQMGWYAAKMAAASSGDSIDMDFS FEF AHVTKFFNYKVVLGKYNAQGLGSDHEMLRCKGRGIHQSR
HAKWTNDGSCLNW

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FIGURE 3531

ACTGGCTGCTCTGAAAAGCCATCTTTGCATTGTGCCTCGTCAGCCTCCTTGCTCGCCGCAGCCGCCTCCGCCGCG
CGCCTCCTCCGCCGCCGCGGACTCCGGCAGCTTTATCGCCAGAGTCCCTGAACTCTCGCTTTCTTTTTTATCCCC
TGCATCGCGTCACCGGCGTGCCCCACCATGTCAGACGCAGCCGTAGACACCAGCTCCGAAATCACCACCGAGGAC
TTAAAGGAGAAGAAGGAAGTTGTGGAAGAGGCGGAAAATGGAAGAGACGCCCTGCTAACAGGAATGCTAATGAG
GAAAATGGGGAGCCGGAGGCTGACAACGAGGTAGATGAAGAAGAGGAAGAAGGTGGGGAGGAAGAGGAGGAGGAA
GAAGGTGATGGTGAGGAAGAGGACGGAGATGAAGATGAGGGAGCTGAGTCAGCTACGGGCAAGCGGGCAGCTGAA
GATGATGAGGATGACACGCGCTCTCCACCACCCAAACCAACCATGAGAATTTGCAACAGGGGAGGGAAAAAGAA
CCAAACTTCCAAGGCCCTGCTTTTTTTTTCTTAAAAGTACTTTAAAAAGGAACTTGTATTTTTTATTACATT
TTATATTTTTGTACATATTGTTAGGGTCGGCCATTTTAAATGATCTCGGATGACCAAACAGCCTTCGGAGCGTT
CTCTGTCCTACTTCTCACTTTACTTG

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FIGURE 3532

ACTGGCTGCTCTGAAAAGCCATCTTTGCATTGTGCCTCGTCAGCCTCCTTGCTCGCCGCAGCCGCCTCCGCCGCG
CGCCTCCTCCGCCGCCGCCGACTCCGGCAGCTTTATCGCCAGAGTCCCTGAACTCTCGCTTTCTTTTTTATCCCC
TGCAICGCGTCACCGGCGTGCCCCACCATGTCAGACGCAGCCGTAGACACCAGCTCCGAAATCACCACCGAGGAC
TTAAAGGAGAAGAAGGAAGTTGTGGAAGAGGCGGAAAAATGGAAGAGACGCCCTGCTAACAGGAATGCTAATGAG
GAAAATGGGGAGCCGGAGGCTGACAACGAGGTAGATGAAGAAGAGGAAGAAGGTGGGGAGGAAGAGGAGGAGGAA
GAAGGTGATGGTGAGGAAGAGGACGGAGATGAAGATGAGGGAGCTGAGTCAGCTACGGGCAAGCGGGCAGCTGAA
GATGATGAGGATGACGATGTCGATACCCAGAAGCAGAAGACCGACGAGGATGACCAGACAGCAAAAAAGGAAAAAG
TTAAACTAAAAAAGGCCGCCGTGACCTATTGCCCCCTCCACTTCCCGTCTCAGAATCTAAACGTGGTCACCT
TCGAGTAGAGGGGCCGCCGCCGCCACCGTGGGCAGTGCCACCCGCAGATGACACGCGCTCTCCACCACCCAACCC
AAACCATGAGAATTTGCAACAGGGGAGGGAAAAAGAACCAAACTTCCAAGGCCCTGCTTTTTTTTTTCTTAAAAG
TACTTTAAAAAGGAACTTGTATTTTTTATTACATTTTATATTTTGTACATATTGTTAGGGTCGGCCATTTTT
AATGATCTCGGATGACCAACCAGCCTTCGGAGCGTTCTCTGTCTACTTCTCACTTTACTTGTGGTGTGGCCAT
GTTTATTATAATCTCAAAGGAGAAAAAATCTGTAAAAAATGCAAAAATGACAACAGAAAAACCATCTTATTC
CGAGCATTCCAGTAACTTTTTTGTGTATGTACTTAGCTGTACTATAAGTAGTTGGTTTGTATGAGATGGTTAAAA
AGGCCAAAGATAAAAAGGTTTCTTTTTTTTCTTGTCTGTGAAGTTGCTGTTTATTTTTTTTTTGGCCTGTTTGATG
TATGTGTGAAACAATGTTGTCCAACAATAACAGGAATTTTATTTTGCTGAGCTGTTCT

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FIGURE 3533A

AGTAGGGAGGTGGGCAGGAGCCAGTGATGACGGAATGGCAATCACATTTGACCTCTGATCTGTTTATTTCTCCT
CCTTGACGTCTCCATATAAATGTTACACGGGCATCCCCACACTCGGATACGCACCCACAGTGGCTGATTGCGGGG
TAACCGTGTCAATTTGCTTGCAACACTGGCACCTCTGCCCTGCACCCCGGGAGTGAGCAGTGAGTGAGGCTCGGGT
CTGGGCGCTGGCTCCGAATCTTCGGGCTGGGAGAGACTCCACCATCTGGGGGCGGCTGGGGGAGCAGCCTTAGT
GTCTTCCTGCTGATGCAATCCGCTAGGTGCGGAGTCTCCGCCGCGAGAGGGCCGGTCTGCAATCCAGCCCGCCAC
GTGTACTCGCCGCCGCTCGGGCACTGCCCCAGGTCTTGCTGCAGCCGGGACCGCGCTCTGCAGCCGCGAGACCCG
GTCCACACGGCCAGGGGCTACGACCCTTGGGATCTGCCCTCCGCTCAGCTCGAGCTTCCCTCGTGGCCGACGGAA
CAATGAAGGATTGCAGTAACGGATGCTCCGAGAGTGTAACGGAGAAGGAGGATCAAAAGAGGTGGTGGGGACTT
TTAAGGCTAAAGACCTAATAGTCACACCAGCTACCATTTTAAAGGAAAAACAGACCCCAATAATCTGGTTTTTG
GAACTGTGTTACGGATCATATGCTGACGGTGGAGTGGTCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGC
CTCTTCAGAACCTGTCAATGACCCCTGGCTCATCAGCTTTGCACTATGCAGTGGAATTATTTGAAGGATTGAAGG
CATTTGAGGAGTAGATAAATAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATGTATCGCTCTGCTG
TGAGGGCAACTCTGCCGCTATTTGACAAAAGAGCTCTTAGAGTGTATTCAACAGCTTGTGAAATTGGATCAAG
AATGGGTCCCATATTCAACATCTGCTAGTCTGTATATTGCTCTACATTCATTGGAACCTGAGCCTTCTCTTGGAG
TCAAGAAGCCTACCAAAGCCCTGCTCTTTGTACTCTTGAGCCAGTGGGACCTTATTTTTCAAGTGGAACCTTTA
ATCCAGTGTCCCTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAACCTGGGGACTGCAAGATGGGAG
GGAATTACGGCTCATCTCTTTTGCCCAATGTGAAGCAGTAGATAATGGGTGTCAGCAGGTCTGTGGCTCTATG
GAGAGGACCATCAGATCACTGAAGTGGGAACATGAATCTTTTTCTTTACTGGATAAATGAAGATGGAGAAGAAG
AACTGGCAACTCCTCCACTAGATGGCATCATTCTTCCAGGAGTGACAAGGCGGTGCATTCTGGACCTGGCACAATC
AGTGGGGTGAATTTAAGGTGTCAGAGAGATACCTCACCATGGATGACTTGACAACAGCCCTGGAGGGGAACAGAG
TGAGAGAGATGTTTGGCTCTGGTACAGCCTGTGTTGTTTGCCAGTTTCTGATATACTGTACAAAGGCGAGACAA
TACACATTCCAATATGGAGAATGGTCCTAAGCTGGCAAGCCGCATCTTGAGCAAATTAAGTATATCCAGTATG
GAAGAGAAGAGAGCGACTGGACAATTGTGCTATCTGAAATGGAAAATAGAGGATACAATGGAAAATAGAGGATAC
CAACTGTATGCTACTGGGACAGACTGTTGCAATTTGAATTGTGATAGATTTCTTTGGCTACCTGTGCATAATGTAG
TTTGTAGTATCAATGTGTTACAAGAGTGATTGTTTCTTCATGCCAGAGAAAATGAATTGCAATCATCAATGGTG
TTTCATAACTTGGTAGTAGTAACCTACCTTACCTTAGAAAAACATTAATGTAAGCCATATAACATGGGATT
TTCTCAATGATTTTAGTGCTCCTTTTGTACTTCACTCAGATACTAAATAGTAGTTTATCTTTAATATAAGTT
ACATTCTGCTCCTCAACAAATGCAATTTTTGTGTGTGTTTGAAGCTAATTTGAGAAAATTTTCAATAGGTTACA
TTCTCTGAGCCTATCTTTATCCACAGAAAGTGTCTTTCTTTTAAATCAAGACTTTTAAACTGGATTTCCT
CCCATCACTGTTTTTGAAGGTCTCCAAGTCCGTGTTAAGGTAAATATCTGTTTTCTTCTGATGTCACAGCCT
GAGCATACTCTGTGCATTAGGAAGACCTGAGTGCAATTTCCACCATTGCTCTTCCACATTATGTTGTAGCTGGC
TGGCTGTGAGCGCACTACAAGACTGAGGGTCTTGTGCCTTATAGATCTTTGTATCCCCATGGCTGCATATAGT
AGGTACTCAGTAAATGGTTTTATAATGAATCAGTGAACATTTTGCTTCTATAGAAGTGTACCTTCTTTGTTTCTA
TATTATGAAACCTCTTTATTAGAATTTGTGATTGATTCTGACAGTGTATAGATTTACCTTATATTGCTTTATTT
TCCATGAGCTACTAAGTCATTAGAGATACTCTGAAGCATAGTTAGTTTAGGAAATCACTTCATATTGATTGTATT
AGAATTATCTTGGAATTGAAGATATATCCCTAGAGCAGGGGACCCCAACCCCGAGCCATGGGCCACACAGCAGG
AAGAGGTGAGTGGTGGGCCATTGAGGAGCTTCATCTGTATTTATGGCTACTTCCCATCACTCGAATTACCACCTG
AACTCCACCTCTTGTGAGCTCAGTGGCAGCATTAGATTCTCATAGGAGCACAAATCCTATTGTGAACCTGCGATG
CAAGGGATCTAGGCTATGCGCTCCTTATGAGAATCTAATGCTTGATGACCTGAGGTGTAACAGTTTCATCCTGAA
ACCACCTTACCCCTGCAGTCTGTGGAATAATGTCTTCCACAAAACCTGGTCCCTGGTGCCAAAATGTTGGGGA
CCACTGCTCTAGAGAGAGGTGATGATATCATACCAACCAATGGAAATGACAAATGTTTTATGTCAAGTGTTAAT
TGCAGAAATAAATCTTTTTTTTTTTTTTGGTAGAAAACAAAGAGGCATACTCTGATTTTTTATACTCTGTTTTT
GCAGGTGCTCTTTCTTTGAATGGAGATTTGATGAGCAAGTGGTTAGGATGCAGGGAGAGCTACTATGGGTGATA
TTTTCTTGTTTAGGAGCTGTGAGTTAAAATGTATCCTTTGTGGTTTATCTAAGGAAAGTCAATCTTGACAGA
AAACATTTTTCTTGAAGGTCAACTCTCAGACATTGTATTTTGGTTTCCCTCAGTCTCATAACTTCCTTCTTG
CTGAACATATTTTATTCTCTTTTCAGAGAAGGAAAATAAAAAGGATTCTAAAAGTTTGATGCATTGGAAAATTT
CCTTGAGGCATTTAGCAACACATAGAAAATGGGCTTTGATTCTTTTCCAAAACCTTTTAGCCATAGGGTCTTTTAT
AGACAGGGATAGTAAAATGAAAATTGAGAAATATAAGATGAAAAGGAATGATAAAAATATCTTTTAGGGGGCTTT

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FIGURE 3533B

TAATTGGTGATCTGAAATCTTGGGAGAAGCTGTTCTTTTCAGGCCTGAGGTGCTCTTGACTGTGCGCTGCGCACT
GTGTACCCCGAGCAACATTCTAAGGGTGTGCTTTTCGCCTTGGCTAACTCCTTTGACCTCATTCTTCATATAGTAG
TCTAGGAAAAAGTTGCAGGTAATTTAACTGTCTAGTGGTACATAGTAATAAATTTCTATTCTATGAGAAATG
AGAATTATTTATTTGCCATCAACACATTTTATACTTTGCATCTCCAAATTTATTGTGGCGAGACTTGTCCATTGT
GAAAGTTAGAGAACATTATGTTTGTATCATTTCTTTTCATAAAACCTCAAGAGCATTTTTAAGCCCTTTTCATCAG
ACCCAGTGAAAACCTAAGGATAGATGTTTAAAAACTGGAGGTCTCCTGATAAGGAGAACACAATCCACCATTGTCA
TTTAAGTAATAAGACAGGAAATTGACCTTGACGCTTTCTTGTTAAATAGATTTAACAGGAACATCTGCACATCTT
TTTTCTTGTGCACTATTTGTTTAAATTGCAGTGGATTAATACAGCAAGAGTGCCACATTATAACTAGGCAATTAT
CCATTCTTCAAGACTTAGTTATTGTCACACTAATTGATCGTTTAAAGGCATAAGATGGTCTAGCATTAGGAACATG
TGAAGCTAATCTGCTCAAAAAGATCAACAAATTAATATTGTTGCTGATATTTGCATAATTGGCTGCAATTATTTA
ATGTTTAAATTGGGTTGATCAAAATGAGATTCAGCAATTCACAAAGTGCAATTAATATAAACAGAACTGGTGGCACTTA
AAATGATAATGATTAACCTTATATTGCATGTTCTCTTCTTTCACTTTTTTTCAGTTTCTACATTTTCAGACCGAGCT
TGTCAGCTTTTTTGAAGACACATCAGTAGAAACCAAGATTTTAAATGAAGTGCAAGACAAAGGCAAAACCTGA
GCAGTTCCTAAAAAGATTTGCTGTTAGAAATTTCTTTGTGGCAGTCATTTATTAAGGATTCAACTCGTGATACA
CCAAAAGAAGAGTTGACTTCAGAGATGTGTTCCATGCTCTCTAGCACAGGAATGAATAAATTTATAACACCTGCT
TTAGCCTTTGTTTTCAAAAGCACAAAGGAAAAAGTGAAAGGGAAAGAGAAACAAGTGACTGAGAAGTCTTGTTAAG
GAATCAGGTTTTTCTACCTGGTAAACATTCTCTATTCTTTTCTCAAAAGATTGCTGTAAGAAAAAATGTAAGAC

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FIGURE 3534

MKDCSNGCSAECTGEGGSKEVVGTFAKADLIVTPATILKEKPDNNLVFGTVFTDHMLTVEWSSEFGWEKPHIKP
LQNLSLHPGSSALHYAVELFEGKAFRGVDNKIRLFQPNLNMDRMYRSAVRATLPVFDKEELLECIQQLVKLDQE
WVPYSTSASLYIRPTFIGTEPSLGVKKPTKALLFVLLSPVGPYFSSGTFNPNVSLWANPKYVRAWKGGTGDCKMGG
NYGSSLFAQCEAVDNGCQQVLWLYGEDHQITEVGTMNLFYWINEDGEEELATPPLDGIILPGVTRRCILDIAHQ
WGEFKVSERYLTMDDLTTALEGNRVREMFSGTACVVCPSDILYKGETIHIPTMENGPKLASRILSKLTDIQYG
REESDWTIVLS

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FIGURE 3535

AACACATTTTCAGTTTTGCCTGCATCATAAGAGTGAGCACTCCATTGCTTTCTTTCTGCCCACACTGCTACAAT
CCAGCACTAACTATCCATGTCCAGGGTAAGGATCGAGATCGAGAAGCCCACACTGCCAGTGAAAAAGCTACGTCT
TTACTGCATAAATTAGAGGAAGCAATTTTCGGAACAACGGAACCTTCAAACCTATAAAATACTGAATTATCGAACACT
TGCCAGGCACCTTCAGCAGAAGACAAGGAACTGAAGAAGCTTTTAGATGAGGAATTTCTCACTATGATTCCCT
GTCCTGCGCAGATGCAATTCAACAACCTCTTCAAGAAAAATTGAAGCAGTGTTGCCACAACTATATGGTGGTCA
AGAAGCAAGAATACATCAGACACCCCTGACCTTGAACATACGTGCTGGTACACACCTCTGCTGGATGCCTTATC
TCTGGATAGTTTTACAGCAGTTCCAACCTTGAATCAACACCTTTCTCAGGTGTAGCCAACCAAATCCACACTCT
GTGTGAAAGGCCCACATATGGAGAAGTAAAGGATGGTGCTTTGGATGTAAAAAGACAACACAAGTGCCAGGCC
CACAAGTGCCCCAGCCAGGAACGAATCTCTCAGGCTGCATCAGGATGAATGATGACCCAAGTATGGAAGAGAA
TGGTGTGTAACGCGTGTGTCTGAGAGCCTGCTGCAGTCCAGGGAATATTCTCACTACCATTACCCAGACACAC
TTCATCGACAGACGGTACTATAACTTCAAGTGATCCTGGATTAGAAATTCTGAATATGGCTTCTTGTGACCTTGA
CAGAACTCGCTCTGTAAGAAAGAGGAGGATACAAGATCAGCTTCTCCACGATAGAGGCCCAAGGCACAAGTCC
AGCTCATGATAATATTGCATTCCAAGACTCTACGAGTAAGGATAAAACCATATTAAATCTGGAAGCCAAAGAGGA
ACCAGAAACAATAGAAGACATAAAAAAGAACATGCTTCAGGAGACTCTGTGGTTTTCCCTCTTCTGTAAACCAC
TGTGAAATCGGTTAACCTTAGACAAAGTGAGAACACTTCTGCTAATGAGAAGGAGGTGGAGGCAGAATTTCTCAG
ATTATCTTTGGGATTTAAGTGTGACTGGTTTACCTTGGAGAAGAGAGTGAAGCTTGAAGAGAGGTCCCGTGA
GGCAGAAGAAAAATTTGAAGAAAGAAATCACTAACTGTTTTAAACTATTAGAGTCTTTAACACCTCTGTGTGAAGA
TGACAACCAGGCACAGGAAATCATTAAAGAGCTGGAGAAGAGTATAAAGTTTCTTAGCCAGTGTGCAGCACGAGT
GGCCAGTAGGGCTGAGATGTTGGGAGCCATCAATCAGGAAAGCCGGGTAGTAAAGCAGTTGAAGTGATGATTCA
GCACGTAGAAAACTTGAAGAGGATGTATGCCAAAGAGCACGCTGAATTAGAAGAACTGAAACAGGTTCTTCTGCA
GAATGAAAGGTCTTTCAATCCTCTTGAAGATGATGATGACTGCCAAATTAAAAAACGTTTCAGCTTCTCTAACTC
CAAGCCATCTTCTCTACGAAGAGTGACTATTGCCTCTTTACCCAGAAATATTGGAAATGCAGGAATGGTGGCTGG
GATGGAAAAATAATGATCGATTGATGAGGTCAGGAGTGGCGTATTTTGGGGTCAAAGCAGAGTGAACACCG
TCCCTCATTACCTCGATTTATTAGCACCTATTCTGGGCAGATGCTGAAGAAGAAAAATGTGAACTAAAACTAA
AGATGACTCAGAGCCATCTGGAGAAGAAACAGTAGAAAGGACAAGGAAGCCAAGTCTTTCTGAAAAGAAAAATAA
TCCATCAAAAGTGGGATGTCTCTTCAGTTTATGACACAATAGCTTCCTGGGCAACAAATCTCAAGTCCCTCCATCAG
AAAGGCTAATAAGGCCCTCTGGCTCTCTATTGCATTATTGTACTGTTTGCAGCTTTGATGAGCTTCTCTACAGG
CCAATTATTCCAGAAGTCTGTGGATGCCGCTCCACACAGCAAGAGGACTCATGGACGTCTCTAGAACATATCTT
GTGGCCATTTACCAGACTCCGACACAATGGGCCACCACAGTGTGACAGCAGGACATCCTAATATATGGATCTTG
ATTTTAAAGTTTCAGTATCTGAACTTCGTAAATTAGTAACTTTTAGCTGGGAAAGTATAGCATGAAACCAGAGGT
TCTCAGAATGACTGTAAGATAGCTTACATTTCTCTTTTTGCCTTTATCTCCCCAACTAAAATACAATGGG

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FIGURE 3536

CCAGCCCTGGCGTGGGCCCAGCCCGGCCAGGCAGCAATGGGGTTCCTGCAGCTGCTGGTTCGTAGCGGTGCTGGC
ATCCGAACACCGGGTGGCTGGTGCAGCCGAGGTCTTCGGGAATTCAGCGAGGGTCTTATTGAATTTCTGTGGG
GAAATTTAGATACTTCGAGCTCAATAGGCCCTTTCCAGAGGAAGCTATTTTGCATGATATTTCAAGCAATGTGAC
TTTTCTTATTTTCCAAATACACTCACAGTATCAGAATACAACCTGTTTCCTTTTCTCCGACTCTCCTTTCCAATTC
CTCGGAAACAGGCACCTGCCAGTGGACTGGTTTTTCATCCTTAGACCAGAGCAGAGTACATGCACTTGGTACTTGGG
GACTTCAGGCATACAGCCTGTCCAGAATATGGCTATCCTACTCTCCTACTCAGAAAGAGATCCTGTCCCTGGAGG
CTGTAATTTGGAGTTCGATTTAGATATTGATCCCCACATTACTTGGGAGTATAATTCCCTTTGAAACGACTATCAA
GTTTGCCCCAGCAAACCTAGGCTATGCGAGAGGCGTAGATCCCCCACCATGTGACGCTGGGACAGACCAGGACTC
CAGGTGGAGGTTGCAGTATGATGTCTATCAGTATTTTCTGCCTGAGAATGACCTCACTGAGGAGATGTTGCTGAA
GCATCTGCAGAGGATGGTCAGTGTGCCCCAGGTGAAGGCCAGTGCTCTCAAGGTGGTTACCCTAACAGCTAATGA
TAAGACAAGTGTTTCCTTCTCCTCCCTCCCGGGACAAGGTGTCAATATACAATGTCAATTGTTTGGGACCCGTTTCT
AAATACATCTGCTGCCATACATTCTGCTCACACATACGCTTGCAGCTTTGAGGCAGGAGAGGGTAGTTGTGCTTC
CCTAGGAAGAGTGCTTCCAAAGTGTTCTTCACCTCTTTTGCCCTGCTTGGTTTTCTTCAATTTGTTTCTTTGGACA
CAGATTCTGGAAAACAGAAATTATCTTCATAGGCTTTATCATCATGGGATTCTTCTTTTATATACTGATTACAAG
ACTGACACCTATCAAGTATGATGTGAATCTGATTCTGACAGCTGTCACTGGAAGCGTCGGTGGAATGTTCTTGGT
AGCTGTGTGGTGGCGATTTGGAATCCTCTCGATCTGCATGCTCTGTGTTGGACTAGTGCTGGGGTTCTCATCTC
GTCAGTGACTTTCTTTACTCCACTGGGAAACCTAAAGATTTTTCATGATGATGGTGTATTCTGGGTCACTTTCTC
TTGCATAGCTATCCTCATTCCAGTAGTTTTCATGGGCTGCCAAGAATACTGAACATACTGACTTGTGGAGTCAT
TGGCTCCTATTCCGTGGTTTTAGCCATTGACAGTTACTGGTCCACAAGCCTTTCTACATCACTTTGAACGTACT
CAAGAGAGCGCTCAACAAGGATTTCCACAGAGCTTTCACAAATGTGCCTTTTCAAATAATGACTTCATTATCCT
GGCAGTATGGGGCATGCTGGCTGTAAGTGGAATTACGTTACAGATTGGAAGAGAGAGAGGACGACCGTCTTCCC
TCCCCACCCATACAAGTTATGGAAGCAAGAGAGAGAGCGCCGAGTGACAAACATTCTGGACCTAGCTACCACAT
TCTCCATTGAGAGAGAGGCTCTATGGCCGATTAAACCAGATTAAAGGGCTCTTCCAGAAGGAGCAGCCAGCTGG
AGAGAGAACGCCCTTTGCTTCTGTAGATGCCCAGGGGCTTGGTCAGTGTGCCTCAGCTTTGGAGTTCATGCCTGGA
GTGGTTCAACAGTCTCTGGTGCAAGTCTAATAAGAGATCAGGCATATATATCTGTTCTTTGCATAATATTATGGT
GCCCTTATTGATATATGGTAAGGGTGTACTAGGGGATTAGGATGATTGTAAGAGAATGAGAAAGATGACCAAAAG
GTTGGTGGTAGGGAGGCTTTTCTTATTTCCAAATACTTGAGAAATTACCTTTTGGTTTACAAATCTATGATCAA
CTTATTCCATTAAATAGATACATTAAAAAAATTA AAAAATGATTCTTCTGCAGAGCACTGGTGTTCCTTTTATA
ACCCCTTGAAACAAGTCTCTCACCTGAGCCTGTCTAACTTTTCGGAGGGAGTTTATTATTGAGTCTTTATCTGTG
ACAGTATTTGGAGATTTAGGGATTTGATACTTAGGCCTTTGAATTTTAGAATACAAAAAGAGAAGCAAGCCAGAC
ATGGTGGCTCACACCTGTAATCCCAATACTGGGAAGCCAAGGTGGGAGTATCGCTTGAGCCAGGAGTTTGAGAC
CGACATGGGCAACATGACAAGACCCCATCTCTACAAAAAATTA AAAAATTAGCCAGGCATGGTGGCACATGCCT
ACTCCCAGCTCCCAAGGAGACTGAGATGGGAGGATCCCTGGAGCCCTGAAGATTGAGGCTACAGTGAGCCTTGAT
TGTGTCACTGCACTCCAGCTTGGGTGACAGAGACCCTGTCTCGAGAAATT

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FIGURE 3537

MGFLQLLVVAVLASEHRVAGAAEVFGNSSEGLIEFSVGKFRYFELNRPFPEEAILHDISSNVTFLIFQIHSQYQN
TTVSFSPTLLSNSSETGTASGLVFILRPEQSTCTWYLGTSIGQPVNMAILLSYSERDPVPGGCNLEFDLDIDPN
IYLEYNFFETTIFAPANLGYARGVDPPPCDAGTDQDSRWRLQYDVYQYFLPENDLTEEMLLKHLQRMVSVPOVK
ASALKVVTLTANDKTSVSFSSLPQGQVIYNVIVWDPFLNTSAAYIPAHTYACSFEEAGEGSCASLGRVSSKVFFTL
FALLGFFICFFGHRFWKTEFFIGFIIMGFFFYILITRLTPIKYDVNLILTAVTGSVGGMFLVAVWWRFGILSIC
MLCVGLVLGFLISSVTFFTPLGNLKFHDDGVFWVTFSCIALIPVVFMGCLRILNLTGCVIGSYSVVLIDSY
WSTLSYITLNVLKRALNKDFHRAFTNVPFQTNDFIILAVWGMLAVSGITLQIRREGRPFPPHPYKLWKQERE
RRVTNILDPSYHIPPLRERLYGRLTQIKGLFQKEQPAGERTPLLL

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FIGURE 3538

AGACTATCTTTCTAGACAAGGCAGTTGAGGAGGAGGGAGCGCTTGAGGGGGACTGGCCTGGCGTGCACTCCGCAC
CTCGGGGACATTATTGCGCGTGGAACGGCTGCTTTTGGGAAGGCACAACCTTCTGAATGGACCATGACTCCCACCA
AAGATCCCTGTCTCTGATTACCAAACAGCTTCAACCCTGAAACCAGGACGAGAAGTTGACAACATCTGAGTGGA
CAGCTAATTGACCTAAGACTTCAGACCAGACTATTGCCAGAAGAAAAGATGTTTGGTTTTCACAAGCCAAAGAT
GTACCGAAGTATAGAGGGCTGCTGTATTTGCAGAGCTAAGTCCTCCAGTCTCGATTCACTGACAGTAAACGCTA
TGAAAAGGACTTCCAGAGCTGTTTTGGATTGCATGAGACTCGTTTCAGGAGACATCTGCAATGCCTGTGTCTGCT
TGTGAAAAGATGGAAGAAGTTGCCAGCAGGATCAAAAAAACTGGAATCATGTGGTAGATGCAAGGGCTGGACC
CAGTCTAAAGACTACATTGAAACCAAAGAAAAGTGAAGTCTATCTGGGAACAGGATAAAAAGCAACCAGATCAG
TAAACTGCAGAAGGAATTTAAACGTCATAATTCTGATGCTCACAGTACCACCTCAAGTGCCTCCCCAGCTCAATC
TCCTTGTTACAGTAACCAGTCAGATGACGGCTCAGATACAGAGATGGCTTCTGTTTCTAACAGAACACCAGTTTT
TTCTTTTTTAGATCTCACTTACTGGAAAAGACAGAAGATATGTTGTGGGATCATCTATAAAGGCCGTTTTGGGGA
AGTCCTCATTGACACACATCTCTTCAAGCCTTGCTGCAGCAATAAGAAAAGCAGCTGCTGAGAAGCCAGAGGAGCA
GGGGCCAGAGCCTCTGCCCATCTCCACTCAGGAGTGGTGACTGAGGTTTTTATGTAGAAGGGGAACAAAAA
AATATCTGAATTTTGAAAACCAAAAGCTACAACTGACCCTCTTTTTTTTTTGGAGACGGAGTTTTGCTCTTGT
TACCCAGGCTGGAGTGCAGTGGCGTGATCTGGCTCACTGCAACTTCCGTCTCCCGGTTCAAGTGATTCTCCTG
CCTCAGCCTCCCAAGTAGCTGGGTTTTATAGGTGCCCGCCACCAGACCCGGCTAATTTTTTAGTTTTAGTAGAGAC
GGGGTTTACCACGTTGGCCAGGCTGGTCTTAAATGACCCTCTTATTTTTAACTTGGATACCTGCTATTCTGCCA
AAAGACAATTTCTAGAGTAGTTTTGAATGGGTTGATTTCCCCCACTCCCAAACTCTGAAGCCAGTGTCTAGCT
TACTAAAAAAGAGTTGTATATAATATTAAGATGCTGAGTATTTCATAGGAAAGCTGAATGCTGCTGTAAAGTG
CTCTTTAAGTCTTTTTTTTTTTAATCCCCTTCAATGAATGAACTAGGGGAATTTAGGGGACAGAGATGGGA
TTTGTGTATGATAAACTGTATGTAGTTTTTAGTCTTCTGTTTTGAGAAGCAGTGGTTGGGGCATTTTTAAGAT
GGCTGGCTACTCTTGTTTTCCCTCATGATAATAAATTTGTGATAACTCAGTAACATGAACCTGCCCCCTAGAGGTA
GTTGTTAATAATTTTGAAATATTAAGGTCTTGCCAAGCTTCTGATGATTACACCTGTACTACTGATTATTAAGC
AGGACAGACTGAGCTTTCTGTTGCAAAATACCTTGAGGAGAAAGTAATTTCTAAATATACAGAGAGGTAACCTGA
CTATATATGTTGCATCCTGTGCCCTCCCTCATATTAATTTTGATAAAGATTTTAATTTATGTAAACTTCTAAA
GCAGAAATCAAAGCTCCTCTTGGGGAAAATGGCAAGTCTTTAGGATAGGCAAGACCCTGTATGAATAGTACCAAAGC
ATTACCGCATGGTAGAGAACACACTCGATTAAAAATGTTAAGCTATCTGAAAAATAAAATGTGCAAGTCTTCAGG
ATGGCACAAAACAAAGGTTAATGCTTCTTGGGGCACATTTCTTAGAGGGCTTGCTGAGTGTGTAATATAATCGA
CTTTTGTGTTGTGTTACATGACTTCTGTGACTTCATTGAAAATCTGCACAATTCAGTTTCAGCTCTGGATTACTTC
AGTTGACCTTTGTGAAGGTTTTTATCTGTGTAGAATGGGTGTTTGACTTGTTTTAGCCTATTAAATTTTTATTTT
CTTTCACTCTGTATTAATAAGTAAACTTACTAAAAGAAAAGAGGTTTGTGTTACATTAAATGGTTTTGGTTTGG
CTTCTTTTAGTCAGGCTTTCTGAACATTGAGATATCTGAACCTTAGAGCTCTTCAATCCTAAGATTTTCATGAAA
AGCCTCTCACTTGAACCCAAACCAGAGTACTCTTACTGCCTCTTTTCTAAATGTTTCAGGAAAAGCATTGCCAGTT
CAGTCTTTTCAAATGAGGGAGAAAACATTTGCCTGCCTTGTAATAACAAGACTCAGTGCTTATTTTTTAACTGC
ATTTTAAAAATGGATAGTATAATAACAATAAGGAGTAAGCCACCTTTTATAGGCACCCTGTAGTTTTATAGTTC
TTAATCTAAACATTTTATATTTTCTTCTTTTGGAAAAACCTACATGCTACAAGCCACCATATGCACAGACTATA
CAGTGAGTTGAGTTGGCTCTCCACAGTCTTTGAGGTGAATTACAAAAGTCCAGCCATTATCATCCTCCTGAGTT
ATTTGAAATGATTTTTTTTGTACATTTTGGCTGCAGTATTGGTGGTAGAATATACTATAATATGGATCATCTCTA
CTTCTGTATTTATTTATTTATTTACTAGACCTCAACCACAGTCTTCTTTTTCCCCTCCACCTCTCTTGGCCTGTA
GGATGTACTGTATGTAGTCATGCACTTTGTATTAATATATTAGAAATCTACAGATCTGTTTTGTACTTTTTATAC
TGTTGGATACTTATAATCAAACCTTTTACTAGGGTATTGAATAAATCTAGTCTTACTAGAAAATAAAA

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FIGURE 3539

CTTTCCCAAGCGGCTGGCGAAGACGGCAGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCG
CCTGGCGGCCATCGTGGTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTCGTACGCTGCGAAGGCATCAACATT
TCTGGCAATTTCTACAGAAACAAGTTGAAGTACCTCGCTTTCCTCCGCAAGCGGATGAACACCAACTCTTACCGA
GGCTCCTACCACTTCCGGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAGACCAAG
CGAGGCCAGGCCGCTCTGGACCGCCTCAAGGTGTTTGATGGCATCCCACCGCCCTACGACAAGAAAAAGCGGATG
GTGGTTCCTGTTGCCCTCAAGGTGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCAC
GAGTTTGGCTGGAAGTACCAGGCAGGGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTAC
GGGAAGAAGAAACAGCTCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACACA
GAGGTCCTCAAGACCCACGGCCTCCTGATCTGAGCCAATAAAGACTGTTAATTCCTCA

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FIGURE 3540A

CTGAGGGGACCCGCCAGTTTCTAACTCAGTGGCGTTTGGCCCTGATTCCCGGGGCGCTGGCTTTTACGCTAGCAAT1
CTGCCGGCGAAGAAGGTGAGCGCAGTGCTGTGTGGCAGCAGAGCTCCTTAGGACGAGGAGCAGCGGGACGAGGAA
GGGCAGACTGGTGAAATCGCAAACCTGGGCGTCTGTTCCGGCGCCGACCCCTATTTGCAAAGGTCCATGGCTAAT
GAAACACAGAAGGTTGGTGCCATCCATTTTCCCTTTCCCTTACACCCTATTCCATCCAGGAAGACTTTCATGGCA
GAGCTGTACCGGGTTTTGGAGGCTGGCAAGATTGGGATATTTGAGAGTCCAACCTGGCACTGGGAAGTCTTAAGT
CTTATTTGTGGGGCCCTCTCTTGGCTCCGTGACTTTGAACAGAAGAAGCGTGAAGAAGAGGCGACGACTCCTTGAA
ACTGGAACCTGGCCCTTACATGATGAGAAAGATGAATCCCTGTGTCTGTCTTCTTCTGCGAAGGGGCTGCAGGC
ACCCCGAGGCCTGCTGGAGAACC GGCTGGGTACTCAGTTTGTGCAGAAGAAAGAAGAGAGGGGACCTGGTGGAG
CGACTAAAGGCGGAGCAGGCCAGGAGGAAGCAGCGAGAAGAACGCCTGCAGCAGCTGCAGCACAGGGTGCAGCT
AAGTATGCAGCCAAGCGCCTGAGGCAGGAAGAAGAAGAAAGAGAGAATCTCCTCCGCCTCAGCAGGGAGATGCTA
GAGACAGGCCCGGAGGCTGAGCGGCTGGAGCAGCTGGAGTCTGGGGAGGAGGAGCTGGTCTCGCCGAATACGAG
AGTGATGAGGAGAAAAAGGTGGCGAGCAGAGTGGATGAGGATGAGGATGACCTGGAGGAAGAACACATAACTAAG
ATTTATTACTGTAGTCGGACACACTCCAGCTGGCCAGTTTGTGCATGAGGTGAAGAAGAGCCCCCTTTGGCAAG
GATGTTTCGGCTGGTCTCCCTTGGCTCCCGGCAGAACCTTTGTGTAATGAAGACGTGAAAAGCCTAGGTTCTGTG
CAGCTTATCAACGACCGCTGTGTGGACATGCAGAGAAGCAGGCACGAGAAGAAGAAAGGAGCTGAGGAGGAGAAG
CCAAAGAGGAGGAGGCAGGAGAAGCAGGCAGCCTGCCCTTCTACAACCACGAGCAGATGGGCCTTCTCCGGGAT
GAGGCCCTGGCAGAGGTGAAGGACATGGAGCAGCTGCTGGCCCTTGGGAAGGAGGCCCGGGCCTGTCCCTATTAC
GGGAGCCGCCTTGCCATCCCTGCAGCCAGCTGGTGGTGTGCTGCCCTATCAGATGCTGCTGCATGCGGCCACTCGG
CAGGCCGCGGGCATCCGGCTGCAGGACCAGGTGGTGATCATCGACGAGGCGCACAACTGATCGACACCATCACG
GGCATGCACAGCGTGGAGGTGAGCGGCTCCCAGCTCTGCCAGGCCATTCCAGCTGCTGCAGTACGTGGAGCGA
TACGGGAAGCGTTTGAAGGCCAAGAACCTGATGTACCTGAAGCAGATCCTGTATTTGCTGGAGAAATTCTGGGCT
GTGCTAGGGGGGAACATTAAGCAAAATCCCAATACACAGAGTCTGTACAGACAGGGACGGAGCTGAAGACCATC
AACGACTTTCTCTTCCAGAGCCAGATCGACAACATCAACCTGTTCAAGGTGCAGCGATACTGTGAGAAGAGCATG
ATCAGCAGAAAGCTCTTTGGATTCACTGAACGGTACGGAGCAGTGTCTCATCCCGGGAGCAGCCCAAACCTGGCT
GGGTTTCAGCAATTCTTGCAAGCCTGCAGAGCCTGCAGCCCAGGACGACTGAAGCTCTTGCAGCCCCCTGCAGACGAGAGTCAG
GCCAGCACCCCTGCGACACAGCTTCTCCACTGATGCACATCCAAGGCTTCTTGGCAGCTCTCACTACGGCCAACCAG
GACGGCAGGGTCATCCTGAGCCGCCAAGGCAGCCTCAGTCAGAGCACCCCTGAAGTTTTTGCTCCTGAATCCAGCT
GTGCACTTTGCCCAAGTGGTGAAGGAATGCCGGGCAGTGGTCATTGCGGGGGGTACCATGCAGCCGGTGTCTGAC
TTCCGGCAGCAGCTGCTGGCCTGTGCCGGGTGGAAGCTGAGCGCGTGGTGGAGTTTTCTGTGGTACAGTGATC
CTCCAGACAACATCCTGCCCTCGTCACTGTGCAGCGGGATCTCCAACCAGCCGCTGGAATTCAGGTTCCAGAAA
AGAGAGCTGCCTCAGATGATGGACGAGGTGGGTGCGATTCTCTGTAACCTGTGCGGTGTGGTTCCTGGAGGGGTG
GTCTGTTTCTTCCCTCCTACGAGTACCTGCGCCAGGTCCATGCCCACTGGGAGAAGGTGGCCTGCTGGGCCGT
CTGGCTGCCAGGAAGAAGATATTCCAGGAACCTAAGAGCGCACACCAGGTGGAGCAGGTGCTGCTGGCATATTCC
AGGTGCATCCAGGCCTGTGGCCAGGAGAGAGGCCAGGTGACAGGGGCCCTGCTCCTCTCTGTGGTTGGAGGAAAG
ATGAGTGAAGGGATCAACTTCTTGACAACCTAGGCCGGTGTGTGGTGATGGTGGGCATGCCCTTCCCCAACATC
AGGTCTGCAGAGCTGCAGGAGAAGATGGCCTACTTGGATCAAACCTCAGCCCCCGCCAGGCACCCCCAGGGAA
GGCTCTGGTGGAGAACCTGTGCATGAAGGCCGTCAACCAGTCCATAGGCAGGGCCATCAGGCACCAGAAGGATTT
TGCCAGCGTAGTGCTCCTGGACCAGCGATATGCCCGGCCCTGTCTTGCCAAAGCTGCCGGCTGGATCCGAGC
CGGTGTGGAGGTCAAAGCTACCTTTGGCCCCGCCATTGCTGCTGTGCAGAAGTTTACC6GGGAGAAGTCGGCCTC
TTCCTGATGGGCAACCACACCACTGCTTGGCGCCGTGCCCTTCTTTGTCTGCCCCTGGAGACAGTGTTTGTCT
GTGGGCGTGGTCTGCGGGGATCCTGTTTACAAAGGTGAAACCCAGGAGGAGAGTGTGAGTCCAGATGCTGCCAG
GACCCAGGCACAGGCGTTAGCTCCCGTAGGAGAAAATGGGGAAATCTGATGAACAGTGGGTCTGGCTGCTTCTCT
TGGGCGGTTCCAGGGCAGCTCCCCCTCCTGGAATAGAATCTTTCTTCCATCCTGCATGGCTGAGAGCCAGGCTTC
CTTCTGTCTCCGCAGGAGGCTGTGGCAGATGTGGCATCCACTGTGGCATCTCCGTCTCTGCCACCTTCTTAAG
AGGCGAGATGGAGCAGGCCCATCTGCCTCTGCCCTTTCTAGCCAAGGTTATAGCTGCCCTGGACTGCTCACTCTC
TGGTCTCAATTTAAAATGATCCATGGCCACAGGGCTCCTGCCACAGGGGCTTGTACCTTCCCCCTCCTCTTCTC
AGTCACTCCTTCAGTAGAAGGCCCTGCTCCCTATCCTGTCCACAGCCCTGCCTGGATTGTATCCTTGGCTTCG
TGCCAGTTCTCCAAGTCTATGGCACCTCCCTCCCTCTCAACCCTTGAGCAAACCTCCAAGACACCTTCTACCCC

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FIGURE 3540B

AACACCAGCAATTATGCCAAGGGCCGTTAGGCTCTCAACATGACTATAGAGACCCCGTGTCATCACGGAGACCTT
TGTTCTGTGGGAAAATATCCCTCCACCTGCAACAGCTGCCCCTGCTGACTGCGCCTGTCTTCTCCCTCTGACC
CCAGAGAAAGGGGCTGTGGTCAGCTGGGATCTTCTGCCACCATCAGGGACAAACGGGGGCAGGAGGAAAGTCACT
GATGCCCAGATGTTTGCATCCTGCACAGCTATAGGTCCTTAAATAAAAGTGTGCTGTTGGTT

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FIGURE 3541

MANETQKVGAIHFPPFTPYSIQEDFMAELYRVLEAGKIGIFESPTGTGKSLSLICGALSWLRDFEQKKREEEAR
LLETGTGPLHDEKDESLCLSSSCEGAAGTPRPAGEPAWVTQFVQKKEERDLVNRLKAEQARRKQREERLQQLQHR
VQLKYAAKRLRQEEEEERENLLRLSREMLETGPEAERPEQLESGEELVLAYESDEEKKVASRVEDDEDDLEEEH
ITKIYHCSRTHSQLAQFVHEVKKSPFGKDVRLVSLGSRQNLVCNEDVRSLGSVQLINNRCVDMQSRHEKKKGAE
EEKPKRRRQEKQAACPFYNHEQMGLLRDEALAEVKDMEQLLALGKEARACPYGSLAIIPAAQLVVLPYQMLLHA
ATRQAAGIRLQDQVVIIDEAHNLIDTTTSMHSVEVSGSQLCQAHSQLQYMERYGKRLKAKNLMYLLKQILYLLEK
FVAVLGGNIKQNPNTQSLSQTMELKTINDFLFQSQIDNINLFKVQRYCEKSMISRKLFGFTERYGAVFSSREQP
KLAGFQQFLQSLQPRTEALAAPADESQASVPQPASPLMHIEGFLAALTANQDGRVILSRQGSLSQSTLKFLLL
NPAVHFAQVVKECRAVVIAGGTMQPVSNFRQQLLACAGVEAERVVEFSCGHVIPPDNILEPLVICSGVSNQPLEFT
FQKRDLPQMMDEVGRILCNLCGVVSGGVVCFPPSYEYLRQVHAHWEKGGLLGRILAARKKIFQEPKSAHQVEQVLL
AYSRCGQACGQERGPVTGALLSVVGGKMSEGINFSDNLGRCVVMVGMPFPNIRSAELQEKMAYLDQTLPRAPGQ
AHPGKALVENLCMAVNQSIGRAIRHQKDFASIVLLDQRYARPLCWPSCRPGSEPVWRSKLPLAPPLLLCRSFTG
RSRPLPDGQPHHRPAPCPSFVLPSGDSVCRGRGLQGSYKGETQEESVESRALPGPRHRR

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FIGURE 3542

ATGAGTCTGACTTCCAGTTCCAGCGGACGAGTTGAATGGATGGCAGCAGTTACCGTTGCTGCTGGGACAGCTGCA
ATTGGTTATCTAGCTTACAAAAGATTTTATGTTAAAGATCATCGAAATAAAGCTGTGATAAACCTTCACATCCAG
AAAGACAACCCCAAGACAGTACATGCTTTTGACATGGAGGATTTGGGAGATAATGCTGTGTACTGCCGTTTCTGG
AGAGAGCCACGACCTGCCCCAGCTGTTGGAGAAGCTGAAAATAAAGGGAATCAACAATCAGCCAATCATCCAAGC
CAGCAACCTGCTCGCTGTGGCTACCAGCCTCCCCACCCTATTTACGTAGCCTCTATCCTCCTAAGGCTCCTTCA
CAAGATGGCAGAGACCGAAGCAGGTCATTAAGTATCTGGCTGAACGATGGGTTAAGGCCAGAGTGGGCTTCAGAG
CTGGGGCCACTATGA

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FIGURE 3543

CCTCCCCCTTTCCCAAGGACAATCTGCAAGAAAGCAGCGGCGGAGGAGAGCTAAGACTAAAAGAGTGGATCATG
ACCCATGAAGAGCACCATGCAGCCAAAACCCTGGGGATTGGCAAAGCCATTGCTGCTTAACCTCTGGTGGAGAT
GCCCCAAGGTATGAATGCTGCTGTCAGGGCTGTGGTTCGAGTTGGTATCTTCACCGGTGCCCCGTCTTCTTTGTC
CATGAGGGTTATCAAGGCCTGGTGGATGGTGGAGATCACATCAAGGAAGCCACCTGGGAGAGCGTTTCGATGATG
CTTCAGCTGGGAGGCACGGTGATTGGAAGTGCCCGGTGCAAGGACTTTCGGGAACGAGAAGGACGACTCCGAGCT
GCCTACAACCTGGTGAAGCGTGGGATCACCAATCTCTGTGTCATTGGGGGTGATGGCAGCCTCACTGGGGCTGAC
ACCTTCCGTTCTGAGTGGAGTGACTTGTTGAGTGACCTCCAGAAAGCAGGTAAGATCACAGATGAGGAGGCTACG
AAGTCCAGCTACCTGAACATTGTGGGCCTGGTTGGGTCAATTGACAATGACTTCTGTGGCACCAGATATGACCATT
GGCACTGACTCTGCCCTGCATCGGATCATGGAAATTGTAGATGCCATCACTACCACTGCCCAGAGCCACCAGAGG
ACATTTGTGTTAGAAGTAATGGGCCGCCACTGTGGATACCTGGCCCTTGTCACCTCTCTGTCTGTGGGGCCGAC
TGGGTTTTTATTCTGAATGTCCACCAGATGACGACTGGGAGGAACACCTTTGTGCGCGACTCAGCGAGACAAGG
ACCCGTGGTTCTCGTCTCAACATCATCATTGTGGCTGAGGGTGCAATTGACAAGAATGGAAAACCAATCACCTCA
GAAGACATCAAGAATGTTTCGTATGAATGAAGCCAGAGAGGCCCTTAGAATCCATAGCCCCATTCCCTTCTGGCTTCT
GAGTCTCCTGACATTGCTTCTCCCCTTGGTCCTTCTGCACATCTCTCCCTGGTTCCCTGCCCCTGATTGCCTCCC
ACAAAGAACCATTACAAGACAAGAGGCTGAGCTGTCCATGGTTTACCCAAGTCTCTGCTTGTTTTCTTCTTTGA
CTCTGCGTAACCCCTCTCTCTGTCCCTCTGTTGGTCCCTTCAGCTGGTGGTTAAGCGTCTGGGATATGACACCCGG
GTTACTGTCTTGGGGCATGTGCAGAGGGGTGGGACGCCATCAGCCTTTGACAGAATTCTGGGCAGCAGGATGGGT
GTGGAAGCAGTGATGGCACTTTTGAGGGGACCCGATACCCAGCCTGTGTAGTGAGCCTCTCTGGTAACCAG
GCTGTGCGCCTGCCCTCATGGAATGTGTCCAGGTG

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FIGURE 3544

MTHEEHHAAKTLGIGKAIAVLTSGGDAQGMNAAVRAVVRVGIFTGARVFFVHEGYQGLVDGGDHIKEATWESVSM
MLQLGGTVIGSARCKDFREREGRRLRAAYNLVKGITNLCVIGGDGSLTGADTFRSEWSDLLSDLQKAGKITDEEA
TKSSYLNIIVGLVGSIDNDFCGTDMTIGTDSALHRIMEIVDAITTTAQSHQRTFVLEVMGRHCGYLALVTSLS CGA
DWVFIPECPPDDDWEEHLCRRLSETRTRGSRLNIIIVAEGAIDKNGKPITSEDIKNVRMNEAREALESIAHSLLA
SESPDIASPLGPSAHL SLVPCP

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FIGURE 3545A

ACGCAGAGCGCTGCTGGGCTGCCGGGTCTCCCGCTTCCCCCTCCTGCTCCAAGGGCCTCCTGCATGAGGGCGCGG
TAGAGACCCGGACCCGCGCCGTGCTCCTGCCGTTTCGCTGCGCTCCGCCCGGGCCCGGCTCAGCCAGGCCCCGCG
GTGAGCCATGATTGCGCTCGGGGCTCCCCAGACGCTGGTGCTGCTGACGCTGCTCGTCGCCGCTGCTCCTTCGGTG
TCAGGGCCAGGATGTCCGGCAACCAGGACCAAAGGGACAGAAAGGAGAACCTGGAGACATCAAGGATATTGTAGG
ACCCAAAGGACCTCCTGGGCCTCAGGGACCTGCAGGGGAACAAGGACCCAGAGGGGATCGTGGTGACAAAGGTGA
AAAAGGTGCCCCCTGGACCTCGTGGCAGAGATGGAGAACCTGGGACCCCTGGAAATCCTGGCCCCCTGGTCCCTCC
CGGCCCCCTGGTCCCCCTGGTCTTGGTGGAACTTTGCTGCCAGATGGCTGGAGGATTTGATGAAAAGGCTGG
TGGCGCCAGTTGGGAGTAATGCAAGGACCAATGGGCCCCATGGGACCTCGAGGACCTCCAGGCCCTGCAGGTGC
TCCTGGGCCTCAAGGATTTCAAGGCAATCCTGGTGAACCTGGTGAACCTGGTGTCTCTGGTCCCATGGGTCCCCG
TGGTCTCCTGGTCCCCCTGGAAAGCCTGGTGATGATGGTGAAGCTGGAAAACCTGGAAAAGCTGGTGAAAAGGGG
TCCGCTGGTCTCAGGGTGCTCGTGGTTTCCAGGAACCCAGGCCCTCCTGGTGTCAAAGGTGACAGAGGTTA
TCCAGGCCTGGACGGTGCTAAGGGAGAGGCGGGTGCTCCTGGTGTGAAGGGTGAGAGTGGTCCCCGGGTGAGAA
CGGATCTCCGGGCCCCAATGGGTCTCGTGGCCTGCCTGGTGAAAGAGGACGGACTGGCCCTGCTGGCGCTGCGGG
TGCCCGAGGCAACGATGGTCAGCCAGGCCCCGAGGGCCTCCGGGTCTGTCGGTCTGCTGGTGGTCTCGGCTT
CCCTGGTGCTCCTGGAGCCAAGGGTGAAGCCGGCCCCACTGGTGCCCGTGGTCTGAAGGTGCTCAAGGTCTCG
CGGTGAACCTGGTACTCCTGGGTCCCCTGGGCCTGCTGGTGCCCTCCGGTAACCTGGAAACAGATGGAAATCCTGG
AGCCAAAGGATCTGCTGGTGCTCCTGGCATTGCTGGTGCTCCTGGCTTCCCTGGGCCACGGGGCCCTCCTGGCCC
TCAAGGTGCAACTGGTCTCTGGGCCCCGAAAGGTGAGACGGGTGAACCTGGTATTGCTGGCTTCAAAGGTGAACA
AGGCCCCAAGGGAGAACCTGGCCCTGCTGGCCCCAGGGAGCCCCGGACCCGCTGGTGAAAGGCAAGAGAGG
TGCCCGTGGAGAGCCTGGTGGCGTTGGGCCCCATCGGTCCCCCTGGAGAAAGAGGTGCTCCCGGCAACCGCGGTTT
CCCAGGTCAAGATGGTCTGGCAGGTCCCAAGGGAGCCCCGGAGAGCGAGGGGCCAGTGCTTCTGGCCCCAA
GGGAGCCAACGGTGACCTGGCCGCTCTGGAGAACCTGGCCTTCTGGAGCCCCGGGTCTCACTGGCCGCCCTGG
TGATGCTGGTCTCAAGGCAAAGTTGGCCCTTCTGGAGCCCTGGTGAAGATGGTCTGCTGGACCTCCAGGTCC
TCAGGGGGCTCGTGGGCAGCCTGGTGTCTATGGGTTTCCCTGGCCCCAAAGGTGCCAACGGTGAGCCTGGCAAAGC
TGGTGAGAAGGGACTGCCTGGTGCTCCTGGTCTGAGGGGTCTTCTGGCAAAGATGGTGAGACAGGTGCTGCAGG
ACCCCTGGCCCTGCTGGACCTGCTGGTGAACGAGGCGAGCAGGGTGCTCCTGGGCCATCTGGGTTCCAGGGACT
TCTGGCCCTCCTGGTCCCCCAGGTGAAGGTGGAAACAGGTGACCAGGGTGTTCCCGGTGAAGCTGGAGCCCC
TGGCCTCGTGGGTCCCAGGGGTGAACGAGTTTCCAGGTGAACGTGGCTCTCCCGGTGCCAGGCCCCCTCCAGGG
TCCCGGCTCCCGGCACTCCTGGCACTGATGGTCCCAAAGGTGCATCTGCCAGCAGGCCCCCTGGGGC
TCAGGGCCCTCCAGGTCTTCAGGGAATGCCCTGGCGAGAGGGGAGCAGCTGGTATCGCTGGGCCCCAAGGCGACAG
GGGTGACGTTGGTGAGAAAGGCCCTGAGGGAGCCCCCTGGAAAGGATGGTGGACGAGGCCTGACAGGTCCCATTTG
CCCCCTGGCCAGCTGGTGCTAATGGCGAGAAGGGAGAAAGTTGGACCTCCTGGTCTGCAAGAGTGCTGGTG
TCGTGGCGCTCCGGGTGAACGTGGAGAGACTGGGCCCCCGGACCAGCGGGATTTGCTGGGCCTCCTGGTGCTGA
TGGCCAGCCTGGGGCCAAGGGTGAGCAAGGAGAGGCCGCCAGAAAGGCATGCTGGTGCCCTGGTCTCAGGG
CCCCTCTGGAGCACCTGGGCTCAGGGTCTACTGGAGTGACTGGTCTTAAAGGAGCCCCAGGTGCCCAAGGCC
CCCGGGAGCCACTGGATTCCCTGGAGCTGCTGGCCGCGTTGGACCCCCAGGCTCCAATGGCAACCTGGACCCCC
TGGTCCCCCTGGTCTTCTGGAAAAGATGGTCCCAAAGGTGCTCGAGGAGACAGCGGCCCCCTGGCCGAGCTGG
TGAACCCGGCTCCAAGGTCTGCTGGACCCCTGGCGAGAAGGGAGAGCCTGGAGATGACGGTCCCTCTGGTGC
CGAAGGTCCACCAGGTCCCCAGGTCTGGCTGGTCAAGAGGCAATCGTCCGTCTGCTGGGCAACGTGGTGAGAG
AGGATTCCCTGGCTTGCTGGCCCGTCGGGTGAGCCCCGCAAGCAGGGTGCTCCTGGAGCATCTGGAGACAGAGG
TCCTCCTGGCCCCGTGGGTCTCCTGGCCTGACGGGTCTGCAGGTGAACCTGGACGAGAGGGAAGCCCCGGTGC
TGATGGCCCCCTGGCAGAGATGGCGCTGCTGGAGTCAAGGGTGATCGTGGTGAGACTGGTGTGTGGGAGCTCC
TGGAGCCCCCTGGGCCCCCTGGCTCCCCCTGGCCCCGCTGGTCCAAGTGGCAAGCAAGGAGACAGAGGAGAAGCTGG
TGCACAAGGCCCATGGGACCCCTCAGGACCAGCTGGAGCCCCGGGAATCCAGGGTCTCAAGGCCCCAGAGGTGA
CAAAGGAGAGGCTGGAGAGCCTGGCGAGAGAGGCTGAAGGGACACCGTGGCTTCACTGGTCTGCAGGGTCTGCC
CGGCCCTCCTGGTCTTCTGGAGACCAAGGTGCTTCTGGTCTGCTGGTCTTCTGGCCCTAGAGGTCTCCTGG
CCCCGTCCGTCCCTCTGGCAAAGATGGTGCTAATGGAATCCCTGGCCCCATTGGGCCTCCTGGTCCCCGTGGACG
ATCAGGCGAAACCGGCCCTGCTGGTCTCCTGGAAATCCTGGACCCCTGGTCTCCTCAGGTCCCCCTGGCCCTGG

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FIGURE 3545B

CATCGACATGTCCGCCTTTGCTGGCTTAGGCCCGAGAGAGAAGGGCCCCGACCCCTGCAGTACATGCGGGCCGA
CCAGGCAGCCGGTGGCCTGAGACAGCATGACGCCGAGGTGGATGCCACACTCAAGTCCCTCAACAACCAGATTGA
GAGCATCCGCAGCCCCGAGGGCTCCCGCAAGAACCCTGCTCGCACCTGCAGAGACCTGAAACTCTGCCACCCTGA
GTGGAAGAGTGGAGACTACTGGATTGACCCCAACCAAGGCTGCACCTTGGACGCCATGAAGGTTTTCTGCAACAT
GGAGACTGGCGAGACTTGCGTCTACCCCAATCCAGCAAACGTTCCCAAGAAGAACTGGTGGAGCAGCAAGAGCAA
GGAGAAGAAACACATCTGGTTTTGGAGAAACCATCAATGGTGGCTTCCATTTCAGCTATGGAGATGACAATCTGGC
TCCCAACACTGCCAACGTCCAGATGACCTTCCTACGCCTGCTGTCCACGGAAGGCTCCCAGAACATCACCTACCA
CTGCAAGAACAGCATTGCCTATCTGGACGAAGCAGCTGGCAACCTCAAGAAGGCCCTGCTCATCCAGGGCTCCAA
TGACGTGGAGATCCGGGCAGAGGGCAATAGCAGGTTACGTACACTGCCCTGAAGGATGGCTGCACGAAACATAC
CGGTAAGTGGGGCAAGACTGTTATCGAGTACCGGTCACAGAAGACCTCACGCCTCCCCATCATTGACATTGCACC
CATGGACATAGGAGGGCCCGAGCAGGAATTCGGTGTGGACATAGGGCCGGTCTGCTTCTTGTAACCACTGAACC
CAGAAACAACACAATCCGTTGCAAACCCAAAGGACCCAAAGTACTTTCCAATCTCAGTCACTCTAGGACTCTGCAC
TGAATGGCTGACCTGACCTGATGTCCATTATCCACCCCTCTCACAGTTCGGACTTTTCTCCCTCTCTTTCTAA
GAGACCTGAACTGGGCAGACTGCAAAATAAAATCTCGGTGTTCTATTTATTTATTGTCTTCCTGTAAGACCTTCG
GGTCAAGGCAGAGGCAGGAACTAACTGGTGTGAGTCAAATGCCCCCTGAGTGACTGCCCCCAGCCCAGGCCAGA
AGACCTCCCTTCAGGTGCCGGGCGCAGGAAGTGTGTGTCTACACAATGGTGCTATTCTGTGTCAAACACCTC
TGTATTTTTTAAACATCAATTGATATTAAAAATGAAAAGATTATTGGAAAGT

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FIGURE 3546

ATGAGCCACCACCGTCGGGGCTCCGGGGCCGGCTTCAGCTCCACCTCATACCGCCGTACCTTCGGTCCACCGCCC
TCACTATCCCCGGGGCCTTCTCCTACTCGTCCAGCTCCCGCTTCTCCAGCAGCCGCCTGCTGGGGCTCCGCGTCC
CCGAGCTCCTCGGTGCGCCTGGGCAGCTTCCGTAGCCCCCGAGCGGGAGCGGGCGCCCTCCTGCGCCTGCCCTCG
GAGCGCCTCGACTTCTCCATGGCCGAGGCCCTCAACCAGGAGTTCTTGCCACGCGCAGCAACGAGAAGCAGGAG
CTGCAGGAGCTCAACGACCGCTTCGCCAACTTCATCGAGAAGGTACGCTTCTTGAGCAGCAGAACCGCGGCCCTG
CGCGGGGAGCTGAGCCAAGCCCCGGGGCCAGGAGCCGGCGCGCGCCGACCAGCTGTGCCAGCAGGAGCTGCGCGAG
CTGCGGGCAGAGCTGGAGCTGTTGGGCCGCGAGCGTGACCGGGTGCAGGTGGAGCGCGACGGGCTGGCGGAGGAC
CTGGCGGCGCTCAAGCAGAGGTTGGAGGAGGAGACGCGCAAGCGGGAGGACGCGGAGCACAACCTCGTGCTCTTC
CGCAAGGACGTGGACGATGCCACTCTGTCCCGCCTGGAAGTAGAGCGCAAGATTGAGTCTCTGATGGATGAGATT
GAGTTCCTCAAGAAGCTGCACGAGGAGGAGCTGCGAGACCTGCAGGTGAGTGTGGAGAGCCAGCAGGTGCAGCAG
GTGGAGGTGGAAGCCACGGTGAAGCCCGAGCTGACGGCAGCGCTGAGGGACATCCGCGCGCAGTACGAGAGCATC
GCCGCGAAGAACCTGCAGGAGGCGGAGGAGTGGTACAAGTCCAAGTACGCGGACCTGTCCGACGCTGCCAACCGG
AACCACGAGGCCCTGCGCCAGGCCAAGCAGGAGATGAACGAGTCCCGACGCCAGATCCAGAGTCTAACGTGCGAG
GTGGACGGGCTGCGCGGCACGAACGAGGCGCTGCTCAGGCAGTTGAGAGAGCTGGAGGAGCAGTTCGCCCTGGAG
GCGGGGGGCTACCAGGCGGGCGCTGCGCGGCTCGAGGAGGAGCTGCGACAGCTAAAAGAGGAGATGGCGCGGCAC
CTGAGGGAGTACCAGGAGCTCCTCAACGTCAAGATGGCCCTGGACATCGAGATCGCCACCTACCGCAAGCTGCTG
GAGGGCAGGAGAGCCGGATCTCCGTGCCCCGCCATTCTTTGCTCCTTAAATATAAAGACGACTGTGCCTGAG
GTGGAGCCTCCCCAGGACAGCCACAGCCGGAAGACGGTCTGATCAAGACCATTGAGACCCGGAATGGGGAGGTG
GTGACAGAGTCCCAGAAGGAGCAGCGCAGTGAGCTGGACAAGTCTTCTGCCCACAGTTACTGAACCCCTTGGTCC
GGAGCCTTGACTCTGCCCTAGGCCTGCTCAAAGCCCCAAACCCTAAGACCACTCCTGAATTGTCTCCTCTCCCTCT
GCATGTGTCTAAAAGGTGGTACCAGGCATCCCTTTCCTGGCTTATGGCCAAGCCCTACCCGGCCAGCAGTCGCTG
GCCTCTCCCTGCCCTGACACTTGATGTGACCTATGTGCTTCCCTTTTCATGTCCCGATAAGAAGCCAATGATCCC
CCCTCAGGACAAATCTACTCCAGCCACGATGAGAAGTGGGTGAGCCAGGGTCTGAGTTTCACATTTGAACCAAAT
AAAATGCTGTCAAGAGAAAAAA

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FIGURE 3547

MSHHPSGLRAGFSSTSYRRTFGPPPSLSPGAFSYSSSSRFSSSRLLGSASPSSSVRLGSFRSPRAGAGALLRLPS
ERLDFSMAEALNQEF LATSNEKQELQELNDRFANFIEKVRFLEQQNAALRGELSQARGQEPARADQLCQQELRE
LRRELELLGRERDRVQVERDGLAEDLAALKQRLEEETRKREDAEHNVLFRKD VDDATLSRLELERKIESLMDEI
EFLKKLHEEELRDLQVSVESQQVQQVEVEATVKPELTAALRDIRAQYESIAAKNLQEAEEWYKSKYADLSDAANR
NHEALRQAKQEMNESRRQIQSLTCEVDGLRGTNEALLRQLRELEEQFALEAGGYQAGAARLEEELRQLKEEMARH
LREYQELLNVKMALDIEIATYRKLLGEESRISVPVHSFASLNIKT TVPEVEPPQD SHSRKTVLIKTIETRNGEV
VTESQKEQRSELDKSSAHSY

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FIGURE 3548

GTTTCTGTGCGCAGGCTGCGAGGAAAGGCCCTAGGCTGGGTCTGGGTGCTTGGCGGCGGGCGGCTTCCTCCCCGCT
CGTCCTCCCCGGGGCCAGAGGCACCTCGGCTTCAGTCATGCTGAGCAGAGTATGGAAGCACCTGACTACGAAGTG
CTATCCGTGCGAGAACAGCTATTCCACGAGAGGATCCGCGAGTGATTATATCAACACTTCTGTTTGCAACACTG
TACATCCTCTGCCACATCTTCCTGACCCGCTTCAAGAAGCCTGCTGAGTTCACCACAGTTTCATCCTACAAAATG
GGCGTAACAATGTCTACCTACTCCATTGTGTGGACCAAAGGAGATGGTTAATGTGAAAGCCCTTTGTGAACCTGA
AGTGAGCAACTGCTGGATGAATGTCATTACGGGCACAGGCTCTGTGTCATCTCCTCTCCTAGTGCTTCCACAGCC
AGGACCAGAGACCTCCCTGATGACTGGGGAACCTGTGGATGATGAAGATGCCACCGTCAACAAGATTGCGCTCGA
GCTGTGCACCTTTACCTGGCAATTGCCCTGGGTGCTGTCTGCTCCTGCCCCTTCTCCATCATCAGCAATGAGGT
GCTGCTCTCCCTGCCTCGGAACTACTACATCCAGTGGCTCAACGGCTCCCTCATCCATGGCCTCTGGAACCTTGT
TTTTCTCTTCTCCAACCTGTCCCTCATCTTCCTCATGCCCTTTGCATATTTCTTCACTGAGTCTGAGGGCTTTGC
TGGCTCCAGAAAGGGTGTCTGGGCCGGGTCTATGAGACAGTGGTGACGTTGATGCTCCTCACTCTGCTGGTGCT
AGGTATGGTGTGGGTGGCATCAGCCATTGTGGACAAGAACAAGGCCAACAGAGAGTCACTCTATGACTTTTGGGA
GTACTATCTCCCTACCTCTACTCATGCATCTCCTTCCTTGGGGTCTGCTGCTCCTGGTGCTACTCCACTGGG
TCTCGCCCGCATGTTCTCCGTCACTGGGAAGCTGCTAGTCAAGCCCCGGCTGCTGGAAGACCTGGAGGAGCAGCT
GTACTGCTCAGCCTTTGAGGAGGCAGCCCTGACCCGAGGATCTGTAATCCTACTTCCTGCTGGCTGCCTTTAGA
CATGGAGCTGCTACACAGACAGGTCTGGCTCTGCAGACACAGAGGGTCTGCTGGAGAAGAGGCGGAAGGCTTC
AGCCTGGCAACGGAACCTGGGCTACCCCTGGCTATGCTGTGCTTGTGGTGCTGACGGGCCTGTCTGTGCTCAT
TGTGGCCATCCACATCCTGGAGCTGCTCATCGATGAGGCTGCCATGCCCGAGTCATGCAGGGTACCTCCTTAGG
CCAGGTCTCCTTCTCCAAGCTGGGCTCCTTTGGTGCCGTCATTAGGTTGTAATCATCTTTTACCTAATGGTGTC
CTCAGTTGTGGGCTTCTATAGCTCTCCACTCTTCGGAGCCTGCGGCCAGATGGCACGACACTGCCATGACGCA
GATAATTGGGAACCTGTGTCTGTCTCCTGGTCTTAAGCTCAGCACTTCCTGTCTTCTCTCGAACCTGGGGCTCAC
TCGCTTTGACCTGCTGGGTGACTTTGGACGCTTCAACTGGCTGGGCAATTTCTACATTGTGTTCTCTACAACGC
AGCCTTTGCAGGCCTCACCACACTCTGTCTGGTGAAGACCTTCACTGCAGCTGTGCGGGCAGAGCTGATCCGGGC
CTTTGGGCTGGACAGACTGCCGCTGCCGCTCTCCGGTTTCCCCAGGCATCTAGGAAGACCCAGCACCAGTGACC
TCCAGCTGGGGGTGGGAAGGAAAAAAGTGGACACTGCCATCTGCTGCCTAGGCCTGGAGGGAAGCCCAAGGCTAC
TTGGACCTCAGGACCTGGAATCTGAGAGGGTGGGTGGCAGAGGGGAGCAGAGCCATCTGCACTATTGCATAATCT
GAGCCAGAGTTTGGGACCAGGACCTCCTGCTTTTCCATACTTAAGTGTGGCCTCAGCATGGGGTAGGGCTGGGTG
ACTGGGTCTAGCCCTGATCCCAAATCTGTTTACACATCAATCTGCCTCACTGCTGTTCTGGGCCATCCCCATAG
CCATGTTTACATGATTTGATGTGCAATAGGGTGGGGTAGGGGAGGAAAGGACTGGGCCAGGGCAGGCTCGGGA
GATAGATTGTCTCCCTTGCCTCTGGCCAGCAGAGCCTAAGCACTGTGCTATCCTGGAGGGGCTTTGGACCACCT
GAAAGACCAAGGGGATAGGGAGGAGGAGGCTTCAGCCATCAGCAATAAGTTGATCCAGGGTTTGCTTTGTTTT
TTT

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FIGURE 3549

MVNVKALCEPEVSN CWMNVITGTGSVSSPLLVL PQGPETSLMTGEPV DDE DATVNKIALELCTFTLAIALGAVL
LLPFSIISNEVLLSLPRNYIQWLNGLIHGLWNLVFLFSNL SLIFLMPFAYFFTESEGFAGSRKGV LGRVYETV
VTLMLLTLLVLGMVWVASAIVDKNKANRESLYDFWEY YLPYLYSCISFLGVLLLLVCTPLGLARMFSVTGKLLVK
PRLLEDLEEQLYCSAFEEAALTRRICNPTSCWLP LDMELLHRQVLALQTQRVLLEKRRKASAWQRNLGYPLAMLC
LLVLTGLSVLIVAIHILELLIDEAAMPVMQGTSLGQVSFSKLG SFGAVIQVVLI FYLMVSSVVG FYSSPLFRSL
RPRWHD TMTQI IGNCVCLLV LSSALPVFSRTLGLTRFDLLGDFGRFNWLG NFYIVFLYNAAFAGLTTLC LVKTF
TAAVRAELIRAFGLDRLPLPVSGFPQASRKTQH Q

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FIGURE 3550

GGAGGTGGGAAGTATCCCGGGCTGGGGGTGGGGGTACGCCGCACAGCTCCAGTCCGCGTCGCGGCTTCCGGTGCT
AGGTGGAGGGAAGGAAGGAGGGAGCCGGGGAGTGGGCCAGGGCAGCAGCCGGGCTGAAGTCGGCTTGGGGAGCCA
GAGGGAGCGGAGCGGAACCTGCGGGGCAGAGGCGGCGGCCGAGCGGCGCAGCTGATAGCAGGAACAGGATCAAG
TCTTCCATACCAGGGACCAGGCCAAAACCAGACTGCCACTGCCCTACTTGGGCCCCACTGTCCCCAGAAAGCAG
CTGCTGTGATCATGGGCAATATCTTTGGAAACCTTCTCAAGAGCCTGATTGGGAAGAAGGAGATGCGCATCCTGA
TGGTGGGCCTGGATGCCGCAGGAAAGACCACCATCTATACAAGCTGAAACTGGGGGAGATCGTCACCACCATCC
CTACCATTGGGTTCAATGTGGAGACAGTGGAGTATAAGAACATCAGCTTTACAGTGTGGGATGTGGGTGGCCAGG
ACAAGATTGACCCCTCTGGAGACACTACTTCCAGAACACCCAAGGGTTGATATTTGTGGTTCGACAGCAATGATC
GGGAGCGAGTAAATGAGGCCCGGGAAGAGCTGATGAGAATGCTGGCGGAGGACGAGCTCCGGGATGCTGTACTCC
TTGTCTTTGCAAACAAACAGGATCTGCCTAATGCTATGAACGCTGCTGAGATCACAGACAAGCTGGGCCTGCATT
CCCTTCGTCACCGTAACCTGGTACATTACAGGCCACCTGTGCCACCAGCGGGGACGGGCTGTACGAAGGCCTGGACT
GGCTGGCCAATCAGCTCAAAAACAAGAAGTGAAGGCCAGACAGCCCTAACAAGCAGCCACCCACCCCTGACAT
ACCTACTGTCACCCCTGCCCCAGTCCCTACCCCTTCTCTCCATGCAAGTGTGGCCAGGGCCCTGGGTATCATGTCC
ACATGCCCAGCAAGAGCCTTGCCCTCCCTGCCCTCCCTCTTTTCTGTCCACCTATATGACCAATCCCTAATT
GCTGTCTGATGATGAGTCATTCCAATTTACTGGATTAAAAACAAAAGTTGTTACGGTTTCATGGGGTGGCCCC
TCTCTCTCTCTACCTCTGGGTTTCGGGAGGTGCGAGTGGGGTATTCTCTTTGTTTGGCAGTGGTTGCTGTCTCT
TGGCATCTGAGTCCTTTCCCTGTCCCCACAAGCCCTTCTACTCCCTGTTTGCCCTTTCCCTTGGCACCCCTCTCCCT
GTTTTACATGGAAATTGCACGGGCCTCTCTGTGTTTGCCTGATGTGTGCGCCTGTATATACATGTATAGAGAGA
TATATTTGTGGGGGCGGGGGGAGCGGGGAGGGGTGGAGTGAAGCTCAGGGCTTGACGCCAGGACACTGCCAC
TGGAGCCTGTCTCTGCCCTTCCGTGTTGGTGAGATTAAGGGAAGAAGGTGGGAGGGCATTAGTCAAGCCGGAC
TGCCCCAGTCTTTGACTGGTTACCCCTCTCTCTGCAGGTAGGTTTTCTGGATGATAGGACAGATGATGGATTCT
TCACCACCATTTTCTTGTACTCTTCTCTCCACCCTTCTTAGGGCTGGAGGATGGCATTATCTCTAGATGACTG
TTCCCAAGGAGATGCCACTCTGCTCTGCCCTACTGTTGGGAAGGAGAGAGGAACCCACTCACTCTTATCAGCTTA
GAGTGTCAACTGATCCTTCCCCACCATCTTCAGATCTGTTCTCTGGAGCTTGACTGGGGGTGGGGATGGCAA
GTCCATGGTGTGTGTTAGGGACCCAGGGCATTGGGGGAAGGGAGGCGAAGGCCTGAGGTTTTCCATCTTCATTCT
CTTTTGTATTAGGAGAAGGTGAGGCATGGGCCAATCCATTCTGCCTTCCAGTGCCCCACCACCCTTCTGAIC
TTAGGGGTGGATGGGTCACTGTCTTGGTCAGAATTTCTCACCTAGTACTCTACTGGCCTGACCAGGGCT
GACTGGGTATTCTAATGAGGAGCTGGGAAGTGGGGTGACATAGCTGACCTTAGTATCAACCCCCCTCTTCTCCAA
CTCTTGTTTTCTAGTCCAGGATATGCTAAAGGACGAAGATTTCTATTGTTTCCAGGCCCTCAGACCATCCTTGC
TGCCCTTACCCCTCCATGCCCTGCCATCCTCACTCACTTCTCATAAATGGATCTGGGGGTAGAGTGGAGGAA
ATAAAATCCTGAAGTGGTTGTGAGTGTGTGGGATGCAGTGGCTTTCAGGATTCTCCCGCATATTATATGTAGT
TGTTCAGAAGCTGTGTCTACTGCGTCTCTCTGCTGACGGGGGCACTTGTTCTGAGGTCTCGCCTGGGTCTGCTG
ACTTCTGTAGTTTCTGTGAAGACGTGGCTGTCTGTGGGCTCCTGTGTGTGCTGGCTGCGCCTGAGCTCCGAGAC
AGCTGCCCATAACCTGCTAAGGTCAGGGCCCCAGGGCCCCCACAGCATGGCTGAGGGACCCCTTCCAGTAGGGC
TGTCCCAAGCCCCACTCCATGGGGCCAGGTTTTCTGGCCACTTTTGTGATAGCAGATGGATCAATATTAGTAAC
CCCATCCAAGATTGAAGTGTGAAAGAGAGGTTCCAGGGGTATCTCCCTCAGTGCCAGTTACTTAGTGATGTGTTA
CCCAGGATGCAGCAGGTGTGTGCAGGTATCTTGCTCTCTAGGCCTGTGTGTGTGTGTGAGTGTGTGTGTATATGG
GTGTGGGTGTGTTTGTGTGTGGTGGTTGTGGGGGGGTGTTGGAGGTTCTATTTTCAATTAATAATGATTCAATTT
CCCTGGCCCCACAGATGCTTCCCTCCATACTTTTTATTTGCTCTGTTTCTCAGATTTATTTTGTCTTGCCCCAT
TGCTCTCTCTTCTTGAAGTCTTTTCTTTTCAATCTCAACTCATTCACTGCTGTTGCTCATTGCCCCCTTTCCAT
GTATTTTTTCTACTTAGGATTTTCCACTCTATCTTTGTGGTTCATGAGGACTTTGCCTCTTCTCCTGCCTCATT
CCCTGACTTTTCTCTAGTTAGATGTCAGTCTTAAATAGGTTTTCTCATTTCAGGCCTCACCCCTCACCTTGTTTT
TTTGGGGGCTCCAGGGACCAATCTGGGGCTGGAAATGTTAGGAGGTTGCCTTGGTGTGCCCCAGATCTGTCCAG
CAGGGGGCAGTAAGTGATCTTGGTAGTATCCCTGGCTGCTAAGCCCTTGGCAGGGGTGGTCTTTCTACATTCCC
ATTCACTTAACAGCTCTTTTGGGATTGGGTGTTTCAATTCATTTCTGCCACTCCCTCTCCTCTCCTCTCTGGTA
GGTTTAATTTTATGCTTTCCCTGATTCCAGCTTTCTGCTTCTGAGGACTCCCGCTCCCCCACCCCAAAGTTTG
TCTGTGGTGTATAGTGGTAAGTGCAGTTCCTCCTCTGGAATGTAGACTGTATATGTTTAATAACTCACCTTCTC
TATCCTTGCTCAAAATGTGGGATAACGCGATGACTGTGACCCTGGTTGGAAATTAAGTTGTTTATGCA

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FIGURE 3551

MGNIFGNLLKSLIGKKEMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNISFTVWDVGGQDKIR
PLWRHYFQNTQGLIFVVDSDNRERVNEAREELMRMLAEDEL RDAVLLVFANKQDLPNAMNAAEITDKLGLHSLRH
RNWYIQATCATSGDGLYEGLDWLANQLKNKK

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FIGURE 3552

AGTGC GGCGCAGCGCAGCTCCTGAGGTTTTGGTTATGAACAGGATTCCGGATTACAGTCTTGCCAACCAATCGGGG
GAGGATCACTCCAGTGCCAGGTCTCAGGAACCTCTGTCTTGTGCATTCACTCATCGTCCATGCTCTCACCCCTCG
TCTGGAGGGGCGAGGAGTTTTGCATTAAAGCATATCCTTGAAGACAAGAATGCACCCCTTCAAGCAGTGTAGTTATAT
ATCGACGAAGAATGGAAAAAGATGTCCCAATGCTGCCCCAAAGCCAGAGAAGAAAGATGGGGTGTCTTCTGTGC
TGAACATGTCCGTAGGAATGCCCTGGCACTTCATGCTCAAATGAAGAAGACCAACCTAGGGCCTGTGGGTGAAAC
ACTCCTGTGCCAGCTGAGCTCATATGCTAAGACAGAGCTGGGGTCTCAGACTCCAGAAAAGTAGTCGCAGTGAAGC
CAGCCGAATACTAGACATGCTGGTGTCTACACAGCAGAAGAAGTGGCCCTGATTATGCGTGAAAAAGCTAATTTCGT
TTGCAGTCGTTGTATATTGATCAGTTTTAAACGACTTCAGCATCTGCTCAAGGAGAAGAAGCGCCGATACTTACAT
AATCGCAAAGTGGAAACATGAAGCTCTAGGCAGTAGTCTCCTGACTGGCCCAGAGGGACTTTTGGCCAAAGAACGA
GAGAACTTAAAGCGATTAAAATGTCTGCGACGATACCGCCAGCGCTATGGAGTGGAAAGCCTTACTGCATAGGCAG
TTGAAGGAACGGAGAATGCTGGCCACAGATGGTGTCTGCCAACAGGCCCATAACCACTCGTTCCAGTCAGAGGTGC
TTGGCCTTTGTGGATGATGTTTGTGTTTCCAATCAGTCTCTTCCAATGACCAGACACTGCCTTACCCAGAAAGAT
GCGACTGCCATTGGTGACCTGTTAACTCTTTACTGTGGTCTAATGGAGACAGCACTCGACTGAAAGTGAAGGACC
CAGACTCTAGTTGACTTGGATGTTGTGGGTGATGGTATGCAGTGTCTCCTTACCTTTGCTTTTTGATCCTTCA
CTAACCTTGAAGATCATTTAGTCAAAGAAATTGCTGAAGACACAGTGGATATTTTGGGCCAGATGCAGATGGCT
GGAGATGGGTGCAGATCCCAGGGATCTCGAAATTCAGAGAAAGCCTCTGCACCATTGTCTCAGAGTGGATTGGCT
ACTGCAAATGGGAAGCCAGAACCCACTTCTATTAGTTGATAGTTTGGGGAACCATTTTACTTTGGTGGATTTAAA
TTTCTCGTTCTTCAAAGAAGTATTTCTGATCATCTCTCACAAAACACAGGCAACCCAGACTACCTTGTTTTCTT
CTGGATTGAGTATTATAGTCAAACGTAAAGCCAAATTTGAGGACGTGGACCGTGGGTTTCTTCCCACTCAGGGC
AAGGAAGAGAAAAGAGAGATAATCCCTATCAAAGCTTCTGGGATCATTGGGACTATACCTAAAAGGAAAGTGACA
TCTTTGTAATGGGATTTCCCAAGTCATGGATAGAAATCCACTTAAGTAGCTAGGTGGGAGCTGTCTTTGTGAGTG
GTGTCTTTGAGATACTGATGGCCCTAATATCGGTTATCTCTATCTGAAGACCTGCAGTTTAGCTTTTCTTCACT
CTACTTAATTGGGCAGTCTTTAACCCTTTCCCTGGTGAACCTCTGGCTTTTATCCTCTGAGAAAACAGCCCACA
GGACTGGGTCTCTTATCCGTCTTGCTTTTAACCTATGTAAATTTCTGTGGTTGCTATCTTATGTAAAATATAG
TAAAAATTTATTGTATATAGTTTCTATTAAATGTAAAGAAAATGTATGAAAATATCAAACAGTCACCTGAATT
GAATGCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3553

MREKLIRLQSLYIDQFKRLQHLLKEKKRRYLHNRKVEHEALGSSLLTGPEGLLAKERENLKRLKCLRRYRQRYGV
EALLHRQLKERRMLATDGAAQQAHTTRSSQRCLAFVDDVRCSNQSLPMTRHCLTQKDATAIGDLLTLYCGLMETA
LD

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FIGURE 3554A

ATGGACAGCCAGAAGCTGGCTGGT GAGGATAAAGATT CAGAACCGGCAGCTGATGGACCTGCAGCTTCTGAGGAC
CCAAGTGCCACTGAGTCAGACCTGCCAACCCACATGTGGGAGAGGTCTCTGTCTTAGTTCTGGGAGTCCCAGG
CTTCAGGAGACTCCTCAGGACTGCAGTGGGGGTCCGGT GCGGCGTTGTGCTCTCTGTAAGT GCGGGGAGCCAGT
CTACACGGGCAGCGGGAGCTACGGCGCTTTGAGTTGCCATTTGATTGGCCCCGGTGTCCAGTGGTGTCCCTGGG
GGGAGCCCAGGGCCCAATGAGGCAGTGCTGCCAGTGAGGACCTATCACAGATTGGTTTTCCCTGAGGGCCTTACA
CCTGCCACCTAGGAGAACCTGGAGGGTCTGCTGGGCTCACCATTGGTGTGCTGCATGGTTCGGCAGGCGTATGG
GGGCAGGAGGGGCCAGAACTATGTGGTGTGGACAAGGCCATCTTCTCAGGGATCTCACAGCGCTGCTCCCACTGC
ACCAGGCTCGGTGCCTCCATCCCTTGCCGCTCACC TGGA TGTCACGGCTTTACCACTTCCCTGCGCGACTGCC
AGCGGTTTCCTTCTATCCATGAAAACACTGCAGCTGCTATGCCAGAGCACAGTGAGGGGGCTGCATATCTGGAG
GAGGCTCGCTGTGCAGTGTGTGAGGGGCCAGGGGAGTTGTGTGACCTGTTCTTCTGTACCACTGTGGGCATCAC
TATCACGGGGCTGCTGAGCACTGCTCTGACTGCCCCGAAACGTGCTGGCTGGCAGTGCCCTGAATGCAAAGTG
TGCCAAGCCTGCAGGAAACCTGGGAATGACTCTAAGATGTTGGTTTGTGAGACGTGTGACAAAGGATACCATACT
TTCTGCCTAAAACCAACCATGGAGGAAGTGCCTGCTCACTCTTGGAAGTGCAAGGCGTGCCGGGTGTGCCGGGCC
TGTGGGGCGGGCTCAGCAGAACTGAATCCCAACTCGGAGTGGTTTGTAGAACTACTCTCTGTGCACCGCTGTGCAC
AAAGCCCAGGGAGGTGAGACTATCCGCTCCGTTGTGTGAGCAGCATACCCCGGTGTGTAGCAGATTTTACCCCCA
GAGCTGGCGATACCCCCACTGACGAGCCCGATGCTCTGTACGTTGCATGCCAAGGGCAGCCAAAGGGTGGGCAC
GTGACCTCTATGCAACCCAAGGAACAGGGCCCCCTGCAATGTGAAGCCAAACCACTAGGGAAAGCAGGGGTCCAA
CTTGAGCCCCAGTTGGAGGGCCCCCTAAACGAGGAGATGCCACTGCTGCCCCACCTGAGGAGTCACCCCTGTCC
CCACCACCTGAGGAATCACCCACGTCCCCACCACTGAGGCATCACGCCTGTCAACCACTGAGGAATTGCC
GCATCCCCACTTCCTGAGGCATTGCACCTGTCCCGGCCGTGGAGGAATCGCCCTCTCTCCGCCGCTGAGGAG
TCTCTCTGTCTCCCCACCTGAATCATCACTTTTCTCCACTGGAGGAGTCGCCCTTGTCTCCACCGGAAGAG
TCACCCCCATCTCTGCACTTGAGACGCCTCTATCCCCACCACTGAAGCATCGCCCTGTCCCCACCATTTGAA
GAATCTCCTTTGTCCCCGCCACCTGAGGAATTGCCACTTCCCCGCCACCTGAAGCATCTCGCCTGTCTCCACCA
CCTGAGGAGTCACCATGTCCCCTCCACCTGAAGAGTCACCATGTCTCCACCACCGGAGGCATCTCGTCTGTTT
CCACCATTTGAAGAGTCTCCTGTGTCCCCTCCACCTGAGGAGTCTCCCTTTCCCCACCACTGAGGCATCACGC
CTGTCCCCACCACTGAGGACTCGCCTATGTCCCCACCACTGAAGAATCACCTATGTCCCCCACCTGAGGTA
TCGCGCCTATCCCCCTGCCTGTGGTGTACGCCTGTCTCCACCGCCTGAGGAATCTCCCTTGTCCCCACCGGCC
CTGTCTCCTTTGGGGGAGTTAGAGTACCCCTTTGGTGCCAAAGGGGACAGTGACCCTGAGTCACCGTTGGCTGCC
CCCATCCTGGAGACACCCATCAGCCCTCCACCAAGTAACTGCATGACCCTGAGCCTGTGCCCCCTATGATC
CTTCCCCCATCTCCAGGCTCCCCAGTGGGGCGGGCTTCTCCCATCCTGATGGAGCCCCCTTCTCTCCTCAGTGTTCG
CCACTCCTTCAGCATTCCTGTTTCCCCAAACTCCCCCTCCTTCCAGTGCTCTCCTCTGCCCTACCACTGTCC
GTTCCCTCCCCGTTGAGTCCCATAGGGAAGGTAGTGGGGGTCTCAGATGAGGCTGAGCTGCACGAGATGGAGACT
GAGAAAGTTTCAGAACCTGAATGCCAGCCTTGAACCCAGTGCCACCAGTCCTCTCCCTTCCCCAATGGGGGAC
CTTTCCTGCCCCGCCCCAGCCCTGCCAGCCCTGGATGACTTCTCTGGCCTAGGGGAAGACACAGCCCTCTG
GATGGGATTGATGCTCCGGGTTACAGCCAGAGCCTGGACAGACCCTGGCAGTTTGGCTAGTGAAGTTAAAGGC
TCCCTGTGCTCTGAGACCCCGAGGAGCTGGCCCTGTGACCCTATGGAGGTCTACCCGAATGCAAGCAGACA
GCAGGGCAGGGCTCACCATGTGAAGAACAGGAAGAGCCACGTGCACCGGTGGCCCCACACCACCACTCTCATC
AAATCCGACATCGTTAACGAGATCTCTAATCTGAGCCAGGGTGATGCCAGTGCCAGTTTTCTGGCTCAGAGCCC
CTCCTGGGCTCTCCAGACCCGGAGGGGGGTGGCTCCCTGTCCATGGAGTTGGGGGTCTCTACGGATGTTAGTCCA
GCCCAGATGAGGGCTCCCTACGGCTCTGTACTGACTCACTGCCAGAGACTGATGACTCACTATTGTGCGATGCT
GGGACAGCTATCAGCGGAGGCAAAGCTGAGGGGGAGAAGGGGCGGCGCAGCTCCCCAGCCGTTCCCGCATC
AAACAGGGTCGACGACGAGTTTCCAGGAAGACGCCGGCCTCGTGGAGGAGCCCATGGAGGACGTGGTAGAGGA
CGGGCCCGGCTAAAGTCAACTGCTTCTTCCATTGAGACTCTGGTAGTTGCTGACATTGATAGCTCTCCAGTAAG
GAGGAGGAGGAAGAAGATGATGACACCATGCAGAATACCGTGGTTCTTCTTCCAACACAGACAAATTTGTCTTA
ATGCAGGACATGTGTGTGGTATGTGGCAGCTTTGGCCGGGGGGCAGAGGGCCACCTCCTTGCTGTTCGCAGTGC
TCTCAGTGCTATCACCTTACTGTGTCAACAGCAAGATACCAAGGTGATGCTGCTCAAGGGCTGGCGTTGTGTG
GAGTGTATTGTGTGTGAGGTGTGTGGCCAGGCCTCCGACCCCTCACGCCTGCTGCTGTGTGATGACTGTGATATT
AGCTACCACACATACTGCCTGGACCCCCCACTGCTCACCCTCCCCAAGGGCGGCTGGAAGTGCAAGTGGTGTGTG

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FIGURE 3554B

TCCTGTATGCAGTGTGGGGCTGCTTCCCCTGGCTTCCACTGTGAATGGCAGAATAGTTACACACACTGTGGGCCC
TGTGCCAGCCTGGTGACCTGCCCTATCTGTTCATGCTCCTTACGTAGAAGAGGACCTACTAATCCAGTGCCGCCAC
TGTGAACGGTGGATGCATGCAGGCTGTGAGAGCCTCTTCACAGAGGACGATGTGGAGCAGGCAGCCGATGAAGGC
TTTGAAGTGTCTCTCCAGCCCTACGTGGTAAAGCCTGTGGCGCCTGTTGCACCTCCAGAGCTGGTGCCCATG
AAGGTGAAAGAGCCAGAGCCCCAGTACTTTCGCTTCGAAGGTGTGTGGCTGACAGAACTGGCATGGCCTTGCTG
CGTAACCTGACCATGTCAACCACTGCACAAGCGGCGCCAACCGCGAGGACGGCTTGGCCTCCAGGCAGGCAGGA
TTGGAGGGTTCTGAGCCCTCAGATGCCCTTGGCCCTGATGACAAGAAGGATGGGGACCTGGACACCGATGAGCTG
CTCAAGGGTGAAGGTGGTGTGGAGCACATGGAGTGCAGAAATTAAGTGGAGGGCCCCGTCAGCCCTGATGTGGAG
CCTGGCAAAGAGGAGACCGAGGAAAAGCAAAAACGCAAGCGTAAACCATATCGGCCTGGCATTGGTGGTTTCATG
GTGCGACAGCGGAAATCCACACACGCACGAAAAAGGGGCTGCTGCACAGGCGGAGGTGTTGAGTGGGGATGGG
CAGCCCGACGAGGTGATACCTGCTGACCTGCCTGCAGAGGGCGCCGTGGAGCAGAGCTTAGCTGAAGGGGATGAG
AAGAAGAAGCAACAGCGGCGAGGGCGCAAGAAAGAGCAAACTGGAGGACATGTTCCCTGCTTACTTGCAGGAAGCC
TTCTTTGGGAAGGAGCTGCTGGACCTGAGCCGTAAGGCCCTTTTTGTCAGTTGGGGTGGGCCGGCCAAGCTTTGGA
CTAGGGACCCCCAAAAGCCAAGGGAGATGGAGGCTCAGAAAGGAAGGAAGTCCCCACATCGCAGAAAGGAGATGAT
GGTCCAGATATTGCAGATGAAGAATCCCGTGGCCTCGAGGGCAAAGCCGATACACCAGGACCTGAGGATGGGGGC
GTGAAGGCATCCCCAGTGCCCACTGACCTGAGAAGCCAGGCACCCCAGGTGAAGGGATGCTTAGCTCTGACTTA
GACAGGATTTCACAGAAGAACTGCCCAAGATGGAATCCAAGGACCTGCAGCAGCTCTTCAAGGATGTTCTGGGC
TCTGAACGAGAAGCAGCATCTGGGTGTGGAACCCCTGGCCTAGAAGGCAGCCGTACGCCACTGCAGAGGCCCTTT
CTTCAAGGTGGACTCCCTTTGGGCAATCTGCCCTCCAGCAGCCCAATGGACTCCTACCCAGGCCTCTGCCAGTCC
CCGTTCTCGGATTCTAGGGAGCGCGGGGGCTTCTTTAGCCCGGAACCCGGTGAGCCCGACAGCCCTGGACGGGC
TCAGGTGGCACCACGCCCTCCACCCCCACAACCCCCACCACGGAGGGTGAGGGCGACGGACTCTCCTATAACCAG
CGGAGTCTTCAGCGCTGGGAGAAGGATGAGGAGTTGGGCCAGCTGTCCACCATCTCACCTGTGCTCTATGCCAAC
ATTAATTTTCTAATCTCAAGCAAGACTACCCAGACTGGTCAAGCCGTTGCAACAATCATGAAGCTCTGGAGA
AAGGTTCCAGCAGCTGACAAAGCCCCCTACCTGCAAAAGGCCAAAGATAAACCGGGCAGCTCACCGCATCAACAAG
GTGCAAGCAGGCTGAGAGCCAGATCAACAAGCAGACCAAGGTGGGCGACATAGCCCGTAAGACTGACCCAGCCG
GCCCTACATCTCCGATTCCCCCGCAGCCAGGGGCACTGGGCAAGCCGCCCCCGCTGCTGCCCCACCATTTC
ATTGGCAGCCCCACTACCCCGCGCGCTTGTCTACCTCTGCGGACGGGTTCTGAAGCGCGCGGGGCTCGGTG
CCTGGCCCTGACTCGCCTGGTGAAGCTCTTCTCAAGCTCCCAAGGTGCCCGCCCAAGTGCTTCGAGGAC
CCCTTTGACTGGCCCCCTGCCTATCCCCCTGGAGCCCGCTTCCCCACGGCACCGCCACCTATCCCCCTATCCT
AGTCTACGGGGGGCCCCCTGCGCAGCCCCCGATGCTGGGCGCCTCATCTCGTCTGGGGCTGGCCAGCCAGGGGAA
TTCCACATAACCCACCTGGCACCCCCAGACACCAGCCCTCCACACCTGACCAATTCTCAAACCCCGCTGCCCC
TCGCTGGATAAATTTGGCTGTGCTGAGAGCCCTGGGGTAGGGGAGGCAAGCTTCCGAGCCCTGCTCTCGCCC
CCACCTTTTGGGAGTCCCGGAAGGCCCTAGAGGTGAAGAAGGAAGAGCTTGGGGCATCCTCTCTAGCTATGGG
CCCCCAAACCTGGGCTTTGTTGACTCACCTCTCAGGCACCCACCTGGGTGGCCTGGAGTTAAAGACACCTGAT
GTCTTCAAAGCCCCCTGACCCCTCGGGCATCTCAGGTAGAGCCCCAGAGCCCGGGCTTGGGCCTAAGGCCCCAG
GAGCCACCCCTGCCCAGGCTTTGGCACCTTCTCCTCAAGTCACCCAGACATCTTTCGCCCTGGCTCCTACACT
GACCCATATGCTCAGCCCCCATTTGACTCCTCGGCCCAACCTCCGCCCTGAGAGCTGCTGTGCTCTGCCCCCT
CGCTCACTGCCCTCCGACCCCTTTCTCCCGAGTGCTGCCAGTCTCAGTCCCAGTCCAGCTCCAGTCTCCACTG
ACACCCCGGCTCTGTCTGCTGAAGCTTTTTGCCCCATACCCGTTACCCCTCGCTTCCAGTCCCTGACCCCTTAT
TCTCGCCACCCCTACGCCCTCAGTCCCGTGACCAATTTGCCCCATTGCATAAGCCACCCCGACCCAGCCCCCT
GAAGTTGCCTTTAAGGTGGGTCTCTAGCCACACTTCGCTGGGGGCTGGGGAGTTCCAGCAGCCCTGCCCGCG
GGGCCAGCAGGTGAGCTCCATGCCAAGGTCCCAAGTGGGCAGCCCCCAATTTGTCCGGTCCCTGGGACGGGT
GCATTTGTGGGCACCCCTCTCCCATGCGTTTCACTTTCCCTCAGGCAGTAGGGGAGCCTTCCCTAAAGCCCCCT
GTCCCTCAGCCTGGTCTCCCGCCACCCATGGGATCAACAGCCATTTTGGGCCCGGCCACCTTGGGCAAGCCT
CAAAGCACAACTACACAGTAGCCACAGGGAATTTCCACCCATCGGGCAGCCCCCTGGGGCCAGCAGCGGGTCC
ACAGGGGAGAGCTATGGGCTGTCCCCACTACGCCCTCCGTGCGTTCTGCCACCACCTGCACCCGACGGATCCCTC
CCCTACCTGTCCCATGGAGCCTCACAGCGATCAGGCATCACCTCTCCTGTGCAAAAGCGAGAAGACCCAGGGACT
GGAATGGGTAGCTCTTTGGCGACAGCTGAAGTCCAGGTACCCAGGACCCAGGCATGTCCGGCCTTAGCCAAACA

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FIGURE 3554C

GAGCTGGAGAAGCAACGGCAGCGCCAGCGACTACGAGAGCTGCTGATTCCGGCAGCAGATCCAGCGCAACACCCTG
CGGCAGGAGAAGGAAAACAGCTGCAGCAGCTGCAGGAGCAGTGGGGCCTCCAGGCAGCTGGGGTGCTGAGCCCAGC
AGCCCTGCCTTTGAGCAGCTGAGTCGAGGCCAGACCCCTTTGCTGGGACACAGGACAAGAGCAGCCTTGTGGGG
TTGCCCCCAAGCAAGCTGAGTGGCCCCATCCTGGGGCCAGGGTCCTTCCCTAGCGATGACCGACTCTCCCGGCCA
CCTCCACCAGCCACGCCTTCCTCTATGGATGTGAACAGCCGGCAACTGGTAGGAGGCTCCCAAGCTTTCTATCAG
CGAGCACCTATCCTGGGTCCCTGCCCTTACAGCAGCAACAGCAACAACACTGTGGCAGCAACAACAGGCAACAGCA
GCAACCTCCATGCGATTTGCCATGTCAGCTCGCTTTCCATCAACTCCTGGACCTGAAC TTGGCCGCCAAGCCCTA
GGTTCCCCGTTGGCGGGAATTTCCACCCGTCTGCCAGGCCCTGGTGAGCCAGTGCCCTGGTCCAGCTGGTCCCTGCC
CAGTTTATTGAGCTGCGGCACAATGTACAGAAAGGACTGGGACCTGGGGGCACTCCGTTTCTGGTCAGGGCCCA
CCTCAGAGACCCCGTTTTTACCCTGTAAAGTGAGGACCCCAACCGACTGGCTCCTGAAGGGCTTCGGGGCCTGGCG
GTATCAGGTCTTCCCCACAGAAACCCTCAGCCCCACCGGCCCTGAATTGAACAACAGTCTTCATCCAACACCC
CACACCAAGGGTCTTACCCTGCCAAGTGGTTTGGAGCTGGTCAACCGGCCCTCGAGCACTGAGCTTGGCCGC
CCCAATCCTCTGGCCCTGGAAGCTGGGAAGTTGCCCTGTGAGGATCCCAGCTGGATGACGATTTTGATGCCAC
AAGGCCCTAGAGGATGATGAAGAGCTTGCTCACCTGGGTCTGGGTGTGGATGTGGCCAAGGGTGATGAACTT
GGCACCTTAGAAAACCTGGAGACCAATGACCCCACTTGGATGACCTGCTCAATGGAGACGAGTTTGACCTGCTG
GCATATACTGATCCTGAGCTGGACACTGGGGACAAGAAGGATATCTTCAATGAGCACCTGAGGCTGGTAGAATCG
GCTAATGAGAAGGCTGAACGGGAGGCCCTGCTGCGGGGGGTGGAGCCAGGACCTTGGGGCCTGAGGAGCGCCCT
CCCCCTGCTGCTGATGCCTCTGAACCCCGCCTGGCATCTGTGCTCCCTGAGGTGAAGCCCAAGGTGGAGGAGGGT
GGACGCCACCCTTCTCCTTGCCAATTACCATTTGCTACCCCAAGGTAGAGCCCGCACCTGCTGCCAATTCCCTT
GGCCTGGGGCTAAAGCCAGGACAGAGCATGATGGGCAGCCGGGATACCCGGATGGGCACAGGGCCATTTCTAGC
AGTGGGCACACAGCTGAGAAGGCCTCCTTTGGGGCCACGGGAGGACCACAGCTCACCTGCTGACCCCAAGCCCA
CTGAGTGGCCAGGAGGATCCTCCTGCTGGAAAAGTTTGAGCTCGAGAGTGGGGCTTTGACCTTGCTGGTGGA
CCTGCAGCATCTGGGGATGAGCTAGACAAGATGGAGAGCTCACTGGTAGCCAGCGAGTTACCCCTGCTCATTGAG
GACCTGTTGGAGCATGAGAAGAAGGAGCTGCAGAAGAAGCAGCAGCTTTCAGCACAGTTGCAGCCTGCCAGCAG
CAGCAGCAACAGCAGCAGCAGCATTCCCTACTGTCTGCACAGGCCCTGCCAGGCCATGTCTTTGCCACATGAG
GGCTCTTCTCCAGTTTGGCTGGGTCCCAACAGCAGCTTTCCTGGGTCTTGCAAGGTGCCCGACAGCCAGGTTTG
CCCCAGCCACTGATGCCACCCAGCCACCAGCTCATGCCCTCCAGCAACGCCTGGCTCCATCCATGGCTATGGTG
TCCAATCAAGGGCATATGCTAAGTGGGCAGCATGGAGGGCAGGCAGGCTTGGTACCCAGCAGAGCTCACAGCCA
GTGCTATCACAGAAGCCCATGGGCACCATGCCACCTTCCATGTGCATGAAGCCGCAGCAATTGGCAATGCAGCAG
CAGCTGGCAAACAGCTTCTTCCAGATACAGACCTGGACAAATTTGCTGCAGAAGATATCATTGATCCCATTTGCA
AAGGCCAAGATGGTGGCTTTGAAAGGCATCAAGAAAGTATGGCTCAGGGCAGCATTTGGGTGGCACCTGGTATG
AACAGACAGCAAGTGCTCTGCTAGCCAGAGGCTCTCGGGGGGACCTAGCAGTGATCTGCAGAACCATGTGGCA
GCTGGGAGTGCCAGGAGCGGAGTGCTGGTGATCCCTCCCAGCCTCGTCCCAACCCGCCCACTTTTGCTCAGGGA
GTGATCAATGAAGCTGACCAGCGCAGTATGAGGAGTGGCTGTTCCATACCCAGCAGCTCCTACAGATGCAGCTG
AAGGTGCTAGAGGAGCAGATTGGTGATACCCGCAAGTCCCGGAAGGCTCTGTGTGCCAAGCAGCGCACTGCCAAA
AAAGCTGGCCGTGAGTTCCAGAAAGCTGATGCTGAGAAGCTCAAGCTGGTTACAGAGCAGCAGAGCAAGATCCAG
AAACAACAGCAGCAGCAGCAGCAACAACAGCAACAGCACTCAGCTGTGCTGGCTCTCAGCCCTTCCCAGAGTCCC
CGGCTGCTACCAAGCTCCCTGGTCAGCTGCTCCCTGGCCATGGGCTGCAGCCACCACAGGGGCTCCGGGTGGG
CAAGCCGGAGGTCTTCGCTGACCCCTGGGGGTATGGCACTACCTGGACAGCCTGGTGGCCCTTCTTAAATACA
GCTCTGGCCCAACAGCAGCAACAGCAACATTCTGGTGGGGCTGGATCCCTGGCTGGCCCTTTCAGGGGGCTTCTTC
CCTGGCAACCTTGCTCTTGAAGCCTCGGACCTGATTCAAGGCTTTTACAGGAAAGGCAGCTGCAGCTGCAGCAG
CAACGTATGCAGCTGGCCAGAACTGCAGCAGCAGCAGCAGCAGCAACAGCAGCAGCAGCACCTTCTAGGACAG
GTGGCAATCCAGCAGCAACAGCAGCAGGGTCTGGAGTACAGACAAACCAAGCTCTGGGTCCCAAGCCCCAGGGC
CTTATGCCTCCCAGCAGCCACCAAGGCCTCCTGGTCCAGCAGCTGTCCCCTCAACCACCCCAAGGGCCCCAGGGC
ATGCTGGGCCCTGCCAGGTGGCTGTGTTGCAGCAGCAGCACCCTGGAGCTTTGGGCCCCCAGGGCCCTCACAGA
CAGGTGCTTATGACCCAGTCCCGGGTGCTCAGTTCCCCCAGCTGGCACAGCAGGGTCAGGGCCTTATGGGACAC
AGGCTGGTCACAGCCAGCAGCAGCAGCAGCAACAACAGCACCAACAGCAAGGGTCCATGGCAGGGCTGTCCCAT

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FIGURE 3554D

CTTCAGCAGAGTCTGATGTACACAGTGGGCAGCCCAAACCTGAGCGCTCAGCCCATGGGCTCTTTACAGCAGCTT
CAGCAGCAGCAGCAGCTGCAACAGCAACAGCAACTTCAGCAGCAGCAGCAGCAGCAGCTACAACAGCAACAGCAA
CTTCAGCAGCAACAGCTTCAACAGCAGCAACAGCAGCAGCAGCTTCAACAACAGCAGCAGCAACAGCTTCAACAG
CAGCAACAGCAGCTACAACAGCAACAGCAACAACAACAGCAGCAGTTTCAACAGCAGCAGCAACAGCAGCAGATG
GGCCTTTTAAACCAGAGTCGAACCTTTACTGTCTCCTCAGCAACAACAGCAGCAGCAAGTGGCACTTGGCCCTGGC
ATGCCAGCAAAGCCTCTTCAACACTTTTCTAGCCCTGGAGCCCTGGGTCCAACCTCCTCCTGACGGGCAAGGAA
CAAAACACCGTAGACCCAGCCGTTTCTTCAGAGGCCACTGAGGGGCCCTCTACACATCAGGGAGGGGCCGTTAGCA
ATAGGAACCTACCCCTGAGTCAATGGCCACTGAACCAGGAGAGGTAAAGCCCTCACTCTCTGGGGACTCACAACCTC
CTGCTTGTCCAACCCAGCCCAAGCCTCAGCCAGCTCTCTGCAGCTGCAGCCACCTCTGAGGCTTCCAGGACAA
CAGCAGCAGCAAGTTAGCCTGCTCCACACAGCAGGTGGAGGAAGCCATGGGCAGCTAGGCAGTGGATCATCTTCT
GAGGCCTCATCTGTGCCCCACCTGCTGGCTCAGCCCTCTGTTTCTTAGGGGATCAGCCTGGGTCCATGACCCAG
AACCTTCTGGGCCCCCAACAGCCCATGCTAGAGCGGCCCATGCAAAATAATACAGGGCCACAACCTCCCAAACCA
GGACCTGTCTCCAGTCTGGGCAGGGTCTGCTGGGGTTGGAATCATGCCTACGGTGGGTGAGCTTCGAGCACAG
CTCCAAGGAGTCTGGCCAAAACCCACAGCTGCGGCACCTTAAGTCTCAGCAGCAGCAGCAGCTACAGGCACTC
CTCATGCAGCGGCAGCTGCAGCAGAGTCAGGCAGTACGCCAGACCCCAACCTACCAGGAGCCTGGGACCCAGACC
TCTCCCCCTCAGGGCCTCCTGGGCTGCCAACCTCAACTTGGGGGCTTCCCTGGACCACAGACAGGCCCCCTCCAG
GAGCTAGGGGCAGGGCCTCGACCTCAGGGCCCAACCCCGGCTCCCTGCCCAACAGGAGCCTTATCTACAGGACCA
GTCCTTGGCCCTGTCCATCCACACCTCCACCATCCAGCCCTCAAGAGCCAAAGAGACCTTACAATTACCTTCC
CCCAGCTCCAGCTTCCCACTGAGGCCAGCTCCCTCCCACCCATCCAGGGACCCCAACCTCAGGGGCCAACCC
TTGGAGCCGCTCCTGGGAGGGTCTCACCTGCTGCTGCCAGCTTGACAGATACCTTGTGTTAGCAAGGGTCTGGGA
CCTTGGGATCCCCAGACAACCTAGCAGAAACCCAGAAGCCAGAGCAGAGCAGCCTGGTACCTGGGCATCTGGAC
CAGGTGAATGGACAGGTGGTGCCTGAGGCATCCCAACTCAGCATCAAGCAGGAACCTCGGGAAGAGCCATGTGCC
CTGGGAGCCAGTCAGTGAAGAGGGAGGCCAATGGGGAGCCAATAGGGGCACCAGGAACCAAGCAACCACTCCTG
CTGGCAGGCCCTCGCTCAGAAGCTGGGCATCTGCTCTTGACAGAGCTACTCCGGGCAAAGAATGTGCAACTCAGC
ACTGGGCGGGGGTCCGAGGGGCTGCGAGCTGAGATCAACGGGCACATTGACAGCAAGCTGGCTGGGCTGGAGCAG
AAACTACAGGGTACCCCCAGCAACAAGGAGGATGCAGCAGCAAGGAAGCCTTTGACACCGAAGCCCAAGCGGGTA
CAGAAGGCAAGCGACAGGTTGGTGAGCTCCCGAAAGAAGCTGCGGAAGGAGGACGGGGTCAGGGCCAGCGAGGCC
TTGCTGAAACAGCTGAAACAGGAGCTGTCCCTGCTGCCCTTAACGGAGCCTGCTATCACCGCCAATTTTAGCCTC
TTTGCCCCCTTTGGCAGTAGGCTGCCAGTCAATGGGAGCAGCAGCTGAGGGGGGCCCTTTGGAAGTGGGGCGCTG
CCCCTGGCCCTGACTACTATTCCCAGCTGCTTACCAAGAATAACCTGAGTAACCCGCCGACACCCTCGTCTG
CTGCCCCCAACCCCAACCCCATCGGTGACAGCAAGAATGGTGAATGGCGTCACCCCATCTGAAGAGCTGGGGGAG
CACCCCAAGGATGCTGCCTCTGCCCGGATAGTGAAGGGCACTGAGGGATACTTCAGAGGTGAAGAGTCTAGAC
CTGCTGGCTGCCTTGCTTACACCCCTCACAATCAGACTGAGGATGTCAGGATGGAGAGTGATGAGGATAGCGAT
TCTCCTGACAGCATTGTGCCAGCTTCATCCCCTGAGAGCATCTTGGGGGAGGAGGCCCTCGTTTCCCTCATCTG
GGCTCAGGCCGCTGGGAGCAAGAGGACCGGGCCCTCTCCCTGTCTATCCCCTCATTCCTCGGGCCAGCATCCCA
GTCTTCCCAGATACCAAACCTTATGGGGCCCTTGGCCTGGAGGTCCCTGGAAAGCTGCCTGTACAACTTGGGAA
AAGGGCAAAGGAAGTGAGGTGTGAGTCATGCTCACAGTCTCTGCTGCTGCAGCCAAGAACCTGAATGGCGTGATG
GTGGCAGTGGCGGAGCTGCTGAGCATGAAGATCCCCAACTCCTATGAGGTGCTGTTCCAGAGAGCCCCGCCCGG
GCAGGCACTGAGCCAAAGAAGGGGGAAGCTGAGGGTCTGGTGGGAAGGAAAAGGGTCTGGAAGGCAAGAGCCCA
GACACTGGCCCTGATTGGCTGAAGCAGTTTGATGCAGTGTGCTGGCTATACCTGAAGAGCCAACTAGACATC
TTGAGCCTCCTGAAACAGGAGAGCCCCGCCCCAGAGCCACCCACTCAGCACAGCTATACCTACAATGTCTCCAAT
CTGGATGTGCGACAGCTCTCGGCCCACTCCTGAAGAACCCTCCCCGCCCTTCCCCCTTGGCACCTTCTCCT
GCCAGTCCCCCTACTGAGCCCTTGGTTGAACCTTCCACCGAACCCTTGGCTGAGCCACCCGTCCCCCTACCTCTG
CCACTGGCCTCATCCCCTGAATCAGCCCGACCCAAGCCCCGTGCCCGGCCCTGAAGAAGGTGAAGATTCCCGT
CCTCCTCGCCTCAAGAAATGAAAGGAGTGCCTGGAAGCGGCTTCGGCTGCTGCTGACCATCCAGAAGGGCAGT
GGGCGGCAGGAGGATGAGCGGGAAGTGGCAGAGTTTATGGAGCAGCTTGGCACAGCCTTGCGACCTGACAAGGTA
CCGCGAGACATGCGTCTGCTGTTTCTGTCTAGGAGGGTGACGGGGCCACTGATGGGCCTGCCCGTCTGCTG
AACCTGGACCTGGACCTGTGGGTGCACCTCAACTGTGCCCTTTGGTCCACGGAGGTGTATGAGACCCAGGGCGGG

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FIGURE 3554E

GCACTGATGAATGTGGAGGTTGCCCTGCACCGAGGACTGCTAACCAAGTGCTCCCTGTGCCAGCGAACTGGTGCC
ACCAGCAGCTGCAATCGCATGCGTTGCCCCAATGTCTACCATTTTGCTTGTGCCATCCGTGCCAAGTGCAATGTTT
TTCAAGGACAAGACCATGCTGTGTCCAATGCATAAGATCAAGGGGCCCTGTGAGCAAGAGCTGAGCTCTTTTGCT
GTCTTCCGGCGGGTCTACATTGAGCGGGACGAGGTGAAGCAAATCGCTAGCATCATTGAGCGGGGAGAACGGCTG
CACATGTTCCGTGTGGGGGGCCTTGTGTTCCACGCCATCGGACAGCTGCTGCCTCACCAGATGGCTGACTTTTCAT
AGTGCCACTGCCCTCTATCCCGTGGGCTACGAGGCCACGCGCATCTATTGGAGCCTCCGCACCAACAATCGTCGC
TGCTGCTATCGCTGTTCTATTGGTGAGAACACGGGCGGCCGAGTTTGTAATCAAAGTCATCGAGCAGGGCCTG
GAGGACCTGGTCTTCACTGACGCCCTCTCCCCAGGCCGTGTGGAATCGCATCATTGAGCCTGTGGCTGCCATGAGA
AAAGAGGCTGACATGCTGCGACTCTTCCCTGAGTATCTGAAGGGCGAGGAGCTCTTTGGGCTGACGGTGCAATGCC
GTGCTTCGCATAGCTGAATCACTGCCCCGGGGTGGAGAGCTGTCAAAACTATTTATTCCGCTATGGGCGCCACCCC
CTTATGGAGCTGCCACTCATGATCAACCCCACTGGCTGTGCCCCGATCAGAGCCTAAAAATCCTCACACACTACAAA
CGGCCCCATACCTGAACAGCACCAGCATGTCTAAGGCATATCAGAGCACCTTCACAGGCGAGACCAACACCCCC
TACAGCAAGCAGTTTGTGCACTCCAAGTCATCTCAGTACCGGCGGCTGCGCACCGAATGGAAGAACAACGTGTAC
CTGGCTCGCTCCCGTATCCAGGGCCTGGGGCTCTATGCAGCCAAGGACCTAGAAAAGCACACAATGGTTATCGAG
TACATTGGCACCATCATTGGAACGAGGTGGCCAACCGGCGGGAGAAAAATCTACGAAGAGCAGAATCGAGGCATC
TACATGTTCCGAATAAACAATGAACATGTGATTGATGCTACGTTGACCGGCGGCCCTGCCAGGTACATTAACCAT
TCCTGTGCCCCCTAACTGTGTGGCCGAAGTCGTGACATTTGACAAAGAGGACAAAATCATCATCTCCAGCCGG
CGAATCCCCAAAGGAGAGGAGCTAACCTATGACTATCAGTTTGATTTTGAGGACGATCAGCACAAGATCCCCCTGC
CACTGTGGAGCCTGGAATTGTCGGAATGGATGAACTAA

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FIGURE 3555

GCGCCCTTAAAGATGGTGAGGGGGCTCATGCTCTGAGTAGAAGGTGGTGACCTCCAGGAGCGGTGGGATGATGAG
GGCCCGGGCGCCTCTTGCAATGGAGACGGTCATTTCTTCAGATAGCTCCCCAGCTGTGGAAAATGAGCATCCTCA
AGAGACCCCAAGAATCCAACAATAGCGTGTATACTTCCTTCATGAAGTCTCATCGCTGCTATGACCTGATTCCCAC
AAGCTCCAAATTGGTTGTATTTGATACGTCCTGCAGGTGAAGAAAGCTTTTTTGGCTTTGGTGACTAACGGTGT
ACGAGCTGCCCCCTTTATGGGATAGTAAGAAGCAAAGTTTTGTGGGCATGCTGACCATCACTGATTTTCATCAATAT
CCTGCACCGCTACTATAAATCAGCCTTGGTACAGATCTATGAGCTAGAAGAACAAGATAGAACTTGGAGAGA
GGTGTATCTCCAGGACTCCTTTAAACCGCTTGCTGCAATTTCTCCTAATGCCAGCTTGTTTGATGCTGTCTCTTC
ATTAATTCGGAACAAGATCCACAGGCTGCCAGTTATTGACCCAGAATCAGGCAATACTTTGTACATCCTCACCCA
CAAGCGCATTTCTGAAGTTCCTCAAATTGTTTATCACTGAGTTCCTCAAGCCAGAGTTTCATGTCCAAGTCTCTGGA
AGAGCTACAGATTGGCACCTATGCCAATATTGCTATGGTTCGCACTACCACCCCCGCTATGTGGCTCTGGGGAT
TTTTGTACAGCATCGAGTCTCAGCCCTGCCAGTGGTGGATGAGAAGGGGGCGTGTGGTGGACATCTACTCCAAGTT
TGATGTTATCAATCTGGCAGCAGAAAAGACCTACAACAACCTAGATGTATCTGTGACTAAAGCCTTGCAACATCG
ATCACATTACTTTGAGGGTGTCTCTAAGTGCTACCTGCATGAGACTCTGGAGACCATCATCAACAGGCTAGTGGA
AGCAGAGGTTACCGACTTGTAGTGGTGGATGAAAATGATGTGGTCAAGGGAATTGTATCACTGTCTGACATCCT
GCAGGCCCTGGTGCTCACAGGTGGAGAGAAGAAGCCCTGAGCTGGGGGAAGGGGTCATGCAGCACCAGGGGATAT
GCCCCAATCACTGCCTGCTGGAAGCTCTGTGGGAATCAGATGAACTTGAGGGAATTGTGACTCTGTTCCCTGTT
CAGGGTCCCCCTGCCCTTCTATCTGGGAGCTAGGGAAGGTATGGGGGAGGAAAGAGAATGGATTTATAGCTACCTT
TACCTCACACATACACTTGAAAAAATTTTCAGCCTAGCCAGTTCTAGCCCCCTGTCTCTTAGATATATCCCCCT
TTCTGGGTGAACTATAGGCTCTGTGCCTCTCAGACAAATTTCTGATCTCTAAGAGATCCCCAGACCTCACTTGCTT
CTGCCTCCATCTTGGCCCTGATTCAACCTAAGATAATAGCACAAACAAATTTCTTCATAAAGATATTTTTATTCA
CCTGTTCCGTGCTATATGGAGGAGGCCAAGTCCATTTAGTGACATTTCTTCCATAATGTGAGTGGGGAGGATTG
TGG

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FIGURE 3556

METVISSDSSPAVENEHPQETPESNNSVYTSFMKSHRCYDLIPTSSKLVVFDTSIQVKKAFFALVTNGVRAAPLW
DSKKQSFVGMLTITDFINILHRYYSALVQIYELEEHKIETWREVYLQDSFKPLVCISPNASLFDAVSSLIRNKI
HRLPVIDPESGNTLYILTHKRILKFLKLFITEFPKPEFMSKSLEELQIGTYANIAMVRTTTPVYVALGIFVQHRV
SALPVVDEKGRVVDIYSKFDVINLAAEKTYYNNLDVSVTKALQHRSHYFEGVLKCYLHETLETIINRLVEAEVHRL
VVVDENDVVKGIVSLSDILQALVLTGGEKKP

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FIGURE 3557

CTCGACTCTTAGCTTGTGCGGGACGGTAACCGGGACCCGGTGTCTGCTCCTGTGCGCCTTCGCCTCCTAATCCCTA
GCCACTATGGTGATGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTA
CTGCCTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCCTT
CAACACCTTCTTCAGTGAGACGGGCGCTGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAG
GAAGATGCTGCCAATAACTATGCCCCAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGA
ATTCGCAAGCTGGCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACCTGGT
TCTGGGTTTCACCTCCCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCATT
TACCCAGCACCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAACCTCCATCCTCACCACCCACACCACCCTGGAG
CACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCTGTAGAAACCTCGATATCGAGCGC
CCAACCTACACTAACCTTAACCGCCTTATTAGCCAGATTGTGTCTCCATCACTGCTTCCGTCATCTCTGCTGAG
AAAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACCAATGCTTGGCTTTGAGCCAGCCAACCAGATGGTGA
TGTGACCCCTCGCCATGGTAAATACATGGCTTGTGCTGCTTGTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAAT
GCTGCCATTGCCACCATCAAAACCAAGCGCAGCATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGC
ATCAACTACCAGCCTCCCCTGTGGTGCCTGGTGGAGACCTGGCCAAGGCGAGTTTTTCAGAGGCCCCGTGAAGATA
TGGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGAGAGG
AATACTAATTATCCATTCTTTTGGCCCTGCAGCATGTCATGCTCCAGAATTTTCAGCTTCAGCTTAACTGACAG
ACGTTAAAGCTTTCTGGTTAGATTGTTTTCACTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATATTTTCC
ATCATATCTCAAAGTAAAGTCATTAACATC

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FIGURE 3558

MERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYD ICRRLDIERPTYTNLN
RLISQIVSSITASVISAEKAYHEQLSVAEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIK
TKRSIQFVDWCPTGFKVGINYQPPTVVPGGDLAKASFQRPVKIWLPLRRIMRRLVWILLKERVRRKKERNNTNYPFL
LALQHVMLPEFQLQLN

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FIGURE 3559

CTCCAGCAGCACCCGAGAGGGTCAGGAGAAAAGCGGAGGAAGCTGGGTAGGCCCTGAGGGGCTCGGTAAGCCAT
CATGACCACCCGGCAAGCCACGAAGGATCCCCCTCTCGGGGTGTATCTCTACCCCTAGCAAGATTCCGGTACG
CTCTCAGAAACGCACGCCCTTTCCCCACTGTTACATCGTGCGCCGTGGACCAGGAGAACCAAGATCCAAGGAGATG
GGTGCAGAAACCACCGCTCAATATTCAACGCCCCCTCGTTGATTACAGCAGGCCCCAGGCCGAAAGCCAGGCACCA
GGCAGAGACATCACAAAGATTGGTGGGGATCAGTCAGCCTCGGAACCCCTTGGAAGAGCTCAGGCCTAGCCCTAG
GGGTCAAAATGTGGGGCTGGGCCCCCTGCCAGACAGAGGCTCCAGGGACCATAGAGTTTGTGGCTGACCCTGC
AGCCCTGGCCACCATCCTGTAGGTGAGGGTGTGAAGAGCTGTACCTGGGGCGCCAGCCTAGTCTGGCTAAAAG
AGTACTGGTTCGAGGAAGTCAGGGAGGCACCAACCCAGAGGGTCCAGGGTGTTCGGGCCTCTGCATATTTGGCCCC
CAGAACCCCCACCCACCGACTGGACCCTGCCAGGGCTTCCTGCTTCTCTAGGCTGGAGGGACAGGACCTCGAGG
CCGGACATTGTGTCCCCAGAGGCTACAGGCTCTGATTTACCTTCAGGACCTTCCTTTACCCCTTCCACTCGCCC
CAGTTTCCAGGAGCTAAGAAGGGAGACAGCTGGCAGCAGCCGGACTTCAGTGAGCCAGGCCTCAGGATTGCTCCT
GGAGACCCAGTCCAGCCTGCTTTCTCTCTTCTTAAAGGAGAACGCGAGGTTGTCACTCACTCAGATGAAGGAGG
TGTGGCTCTCTTGGTCTGGCCCCAGCGAGTACCATTAAAGAGAAAACCGAGAAATGTCACATACCAGGGACAGCCA
TGACTCCCACTGATGCCCTCCCCCTGCCCTGTGGCCAGCCCTTGCCCTGGCCATGTGGTGCCATGTCCATCACC
CTTTGGACGGGCTCAGCGTGTACCCCTCCCCAGGCCCTCCAACCTCTGACCTCATATTCAGTGTTGCGGCGTCTCAC
CGTTCAACCTAAAACCCGGTTACACCCATGCCATCAACCCCCAGAGTTCAGCAGGCCCAGTGGCTGCGTGGTGT
CTCCCCCTCAGTCCTGCTCTGAAGATCCTGCCCTGCCCTGGGAGCAGGTTGCCGTCCGGTTGTTTGACCAGGAGAG
TTGTATAAGGTCACCTGGAGGGTCTGGGAAACACCGGTGGCCACTCCTTCTGGACCCCACTCTAACAGAACCCC
CAGCCTCCAGGAGGTGAAGATTCAACGCATCGGTATCCTGCAACAGCTGTTGAGACAGGAAGTAGAGGGGCTGGT
AGGGGGCCAGTGTGTCCCTCTTAATGGAGGCTCTTCTCTGGATATGGTTGAACCTTCAGCCCCTGCTGACTGAGAT
TTCTAGAACTCTGAATGCCACAGAGCATAACTCTGGGACTTCCACCTTCTTGACTGTAAAACACTCAGGGCT
GCCAAAGCCCTGTCTTCAGAGGAGTGCGGGGAACACAGCCCTGCCCTCCGGCAGAGCCTGGGCCCCCAGAGGC
CTTCTGTAGGAGTGAGCCTGAGATACCAGAGCCCTCCCTCCAGGAACAGCTTGAAGTACCAGAGCCCTACCTCC
AGCAGAACCCAGGCCCCCTAGAGTCCTGCTGTAGGAGTGAGCCTGAGATACCGGAGTCCTCTCGCCAGGAACAGCT
TGAGGTACCTGAGCCCTGCCCTCCAGCAGAACCCAGGCCCCCTAGAGTCCTACTGTAGGATTGAGCCTGAGATACC
GGAGTCCTCTCGCCAGGAACAGCTTGAGGTACCTGAGCCCTGCCCTCCAGCAGAACCCGGGCCCCCTTCAGCCCAG
CACCCAGGGGCAGTCTGGACCCCCAGGGCCCTGCCCTAGGGTAGAGCTGGGGGCATCAGAGCCCTGCACCCCTGGA
ACA'TAGAAGTCTAGAGTCCAGTCTACCACCCTGCTGCAGTCAGTGGGCTCCAGCAACCAACAGCCTGATCTTCTC
TTCCCAACACCCGCTTTGTGCCAGCCCCCTATCTGCTCACTCCAGTCTTTGAGACCCCCAGCAGGCCAGGCAGG
CCTCAGCAATCTGGCCCCCTCGAACCCTAGCCCTGAGGGAGCGCCTCAAATCGTGTTTAACGCCATCCACTGCTT
CCACGAGGCTCGTCTGGACGATGAGTGTGCCTTTTACACCAGCCGAGCCCTCCCTCAGGCCCCACCCGGGTCTG
CACCAACCCTGTGGCTACATTACTCGAATGGCAGGATGCCCTGTGTTTCATTCCAGTTGGTTCTGCTGCCCCCA
GGGCTCTCCATGATGAGACAACCACTCCTGCCCTGCCGTACTTCTTCTTTTAGCCCTTATTTATTGTCGGTCTG
CCCATGGGACTGGGAGCCGCCCCACTTTTGTCTCAATAAAGTTTCTAAAGTA

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FIGURE 3560

TCCAGACCAACCTGGTGCCCTATCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCGTGCATCTCTGCTGAGA
AAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACCAATGCTTGCTTTGAGCCAGCCAACCAGATGGTGAAAT
GTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAATG
CTGCCATTGCCACCATCAAGACCAAGCGTACCATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGCA
TCAACTACCAGCCTCCCCTGTGGTGCCCTGGTGGAGACCTGGCCAAGGTACAGAGAGCTGTGTGCATGCTGAGCA
ACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAACGTGCCTTTG
TTCACCACCCACACCACCCTGGAGCACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGT
CGTAGAAACCTCGATATCGAGCGCCCAACCTACACTAACCTTAACCGCCTTATTAGCCAGATTGTGTCTCCATC
ACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTTGACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCC

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FIGURE 3561

AATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAATGCTGCCATTGCCACCATCA
AGACCAAGCGTACCATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGCATCAACTACCAGCCTCCCA
CTGTGGTGCCTGGTGGAGACCTGGCCAAGGTACAGAGAGCTGTGTGCATGCTGAGCAACACCACAGCCATTGCTG
AGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAACGTGCCTTTGTTCACTGGTACGTTGGGG
AGGGGATGGAGGAAGGTGAGTTTTTCAGAGGCCCGTGAGGACATGGCTGCCCTTGAGAAGGATTATGAGGAGGTTG
GTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGAGAGGAATACTAAAGTTAAAACGTCACAAAGGTGCTGC
TTTTACAGGGAAGCTTATTCTGTTTTAAACATTGAAAAGTTGTGGTCTGACATGAATGCTTTGTTACAGACCCAA
GCTGTCCATTTCTGTGATGGGTTTTGAATAAAGTATTCCC

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FIGURE 3562

CTCCTTGACTCGAACCTTGGACAGTGGCATTGGGACCTTCCCACCCCCAGACCATGGTAGCAGTGGGACCCCCAG
CAAGAATCTTCTAAGACCAAGCCACCGCGGCTGGATCCCCCACCTGGGGTACCCCCAGCTCGGCCCCCACCCCT
TACCAAAGTCCCCCGCCGCGCCACACACTGGAGCGGGAGGTGCCAGGCATAGAGGAGCTGCTGGTGAGTGGGCG
GCACCCAGCATGCCAGCCTTCCCTGCACTGTACCCGCTGCTCCGGGGCCACCGGGGCCATGAGACCTGTCCTGA
TGATCCCTGTGAAGACCCAGGCCCCACCCCTCCTGTCCAGCTGGCCAAGAAGTGGACCTTCCCCAATACTAGGGC
AGCCGGCAGCTCCTCGGACCCCTCTCATGTGCCCCACCCGACAAGTGGAGGGGCTGCCAGGACCCCCATGGCCCT
GCCCCGTGGACCGGAAGCGAAGCCAGGAGCCAGCCGCCCCGTCCCCCTACGCCCCAGGGGCCACCTTTGGGGGTAG
CCGCACCCAGCACTTCGGACATGGCCGAGGAAGGCAGAGTGGCCAGCGGGGGCCCCCAGGGCTGGAGACCTC
GGAGTCTCTCAGTGACTCACTCTACGACTCGCTGTCTTGTGGGAGTCAGGGCTGAGGGGCTGCGCCACGCCA
CGGCCCCGCTGGAGCTGGGGACCACAGACTGGACCGGCTCTCTTCATGCCAGCCCCGGAGACGGGGACCCCTC
CCTGAAGGGACCAAGGAGGCAGGTGGATAAGAAGGTGAAAAGGGGGTCCCTGGCACACCCACCCACTGCTT
CGGCGGATGAGATGACCGTGCTCAGCTCAGGGAGAGACCCCGCCCTTGGTCCCTTCTCTACCCAGAGTAAGGCT
CTTCCTGGAAGGGACTGGGGGTAAAGGCCACTGTGTGCGAGCCCCCAGTCCCTACTTCAGGCTGAGCCATCTT
GTGGTGCTGGGCTTCCTGCCCCGAAGCCCTCGCGAGGCCCTCCTGGAGGCCCCCGTGCTGGTGGA

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FIGURE 3563

MFMGAGDAPLGSRRPGHPHSSSQVKS KLQIGPPSPGEAQG PLLPSPARG LKFLKL PPTSEKSPSPGGPQLSPQLPR
NSRIPCRNSGSDGSPS PLLARRGLGGGELSPEGAQGLPTSPSPCYTT PDSTQLRPPQSALSTTLSPGPVVSPCYE
NILDLSRSTFRGPSPEPPPSPLQVPTYPQLTLEVPQAPEVLRSPGVPPSPCLPESYPYGSPQEKS LDKAGSESPH
PGRRTPGNSSKKPSQSGRRPGDPGSTPLRDLAALGKLKTGPEGALGSEKNGVPARPGIEKTRGPGKSGESAGD
MVPSIHRPLEQLEAKGGIRGAVALGTNSLKQQEPGLMGDPGARVYSSHS MGARVDLEPVSPRSCLTKVELAKSRL
AGALCPQVPRTPAKVPTSAPSLGKPNKSPHSSPTKLPSKSPTKVVP RP GAPLVTKESPKPDKGKGPWADCGSTT
AQSTPLVPGPTDPSQGPEGLAPHS AIEEKVMKGIEENVLR LQOQERAPGA EVKHRNTSSIASWFG LKKS KLPALN
RRTEATKNKEGAGGGSPLRREV KMEARKLEAESLNISKLM AKAEDLRRALEEEKAYLSSRARPRPGGPAPGPNTG
LGQVQQLAGMYQGADTFMQQLN RVDGKELPSKSWREP KPEYGDFQPVSSDPKSPWPACGPRNGLVGF LQGC GK
PPGKPSSEPGRREEMPSEDS LAEPVPTSHFTACGSLTRTLD SGIGTFPPPDHGSSGTPSKNL PKTKPPRLDPPPG
VPPARPPPLTKVPRRAHTLERE VP GIEELLVSGRHP SMFAFPALLPAAPGHRGHETCPDDPCEDPGPTPPVQLAK
NWTFPNTRAAGSSSDPLMCPPRQLEGLPRTPMVRIAAEERERTREQEGVMWGDQFLQ

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FIGURE 3564

AGAGTGGAGACTGCTGCACGGACTCTGGAACCATGAACATATTTGATCGAAAGATCAACTTTGATGCGCTTTTAA
AATTTTCTCATATAACCCCGTCAACGCAGCAGCACCTGAAGAAGGTCTATGCAAGTTTTGCCCTTTGTATGTTG
TGGCGGCTGCAGGGGCCTATGTCCATATGGTCACTCATTTCATTAGGCTGGCCTGCTGTCTGCCCTGGGCTCCC
TGATATTGATGATTTGGCTGATGGCAACACCTCATAGCCATGAAACTGAACAGAAAAGACTGGGACTTCTTGCTG
GATTTGCATTCCCTTACAGGAGTTGGCCTGGGCCCTGCCCTGGAGTTTTGTATTGCTGTCAACCCAGCATCCTTC
CCACTGCTTTCATGGGCACGGCAATGATCTTTACCTGCTTCACCCTCAGTGCACCTCTATGCCAGGCGCCGTAGCT
ACCTCTTCTGGGAGGTATCTTGATGTCAGCCCTGAGCTTGTTGCTTTTGTCTTCCCTGGGGAATGTTTTCTTTG
GATCCATTTGGCTTTTCCAGGCAAACCTGTATGTGGGACTGGTGGTCATGTGTGGCTTCGTCCTTTTTGATACTC
AACTCATTATTGAAAAGGCCGAACATGGAGATCAAGATTATATCTGGCACTGCATTGATCTCTTCTTAGATTTC
TTACTGTCTTCAGAAAACATGATGATCCTGGCCATGAATGAAAAGGATAAGAAGAAAGAGAAGAAATGAAGTG
ACCATCCAGCCTTTCCCAATTAGACTTCTCTCCTTCCACCCCTCATTTCCTTTTTGCACACATTACAGGTGGTG
TGTTCTGTGATAATGAAAAGCATCAGAAAAGCTTTTGTACTTTGTGGTTTCTCTATTTTGAATTTTTTGATCAA
AAAACGTATTAGCAGAAATATAGTTTGGAGTTTGGCTTCATCTTCTGGGGTTCCCTCCTACTCCCTTTTTTGTCAA
CCCCATCTGTAGCCTCTTCTCTACTCAGGCAGTCGACCCGCCACGATGAGAAGTGGGACCAGCAGAGGGCGCCA
ACTTCAGGAGTCCGCTTTCCACAGGCTTCATTACCCAGTGGACCTGAACTGTTTGGTAGAGCCACCCGGCCC
TTCCTTCTCATTGTGTGTGGTATGCGCACAGTTCCTGTGGGACTGGGCCGTGAGTTTTCCATTGGAAAGAAGT
TCAGTGGTCCCATTTGTTAACTCAGCCTCAAACTCTCAACTGTTCAGGCCCTACAAAGAAAATGGAGAGCCTCTTCTG
GTGGATGCTTTGCTCCCTCTGAGCTGCCCATGCTGGTCTGGCAAACACACCTTTCTGCTTTGCCTTCACAAAAGT
AATGTGTTCCCTTTCCACCCCTTGCTGACCCCTCAGGGAGTCAGCCTGCTTCCATCCATGGGTGGGAAGACTTC
AGCACAAAGGAAAGACTAATTCTTGTGAGGCATTTTTGAAAAGGCTGATTATGTGTATCAAGGTACAGCATCGTA
GGGTTCCCTAAACTTGCCCTGTTTTTGTTTTTTTAGTTTGTATCCCTTACTGAGCGGCCTCTACTAGGTGGC
TGTGATTAAATGTCCCAAGCAAGGATAGGGAAGGGGAATGGTTGAGCCTCTGGAGATCATTGTAACCAATCCTGC
CAGACCTGTTTGGGGCAGTGGGGAGCAAACCTAGATAAGGACCTGTTTGGGGCAGCAGGGAGCAAATCTCCTTT
AACAAACCAAGCAGTTCCTCATTACATCAACAGAGCGAGGCTGTGATAACTTAGGAGGCAGCAATCCTAATAGTC
CTTCAGTGCATTTTAGTCTGTCTCCAACCTGGACACCAGTAGGTAGTGTCAAGCCAGAGATTCGGGGCAGTAGATA
AATGTTTCAATTTACTGATGCATTTTAGTTTTTGGTCTGTGTACCTGTTTTCCAGAAATTTGTGGCCTTTTAGGCGG
GAGTTAGGCGACCAAACAGTGAGAGCCCCAATCCCTGCAGTTTTGTGGCTTCAAGTGTGGGTGGACAGTCCTAA
TGGGGATCTCCAGCTCCTTCTGTGGGCTGCCACAGACAGCTACCCCCAGAAGGTCAATGTTGGGAGTGGTTGT
GGCTCTGAGCTGCTCTACAGAGCTTCAGTGTGAGAGGATCGAGCCATTGAAAGCTCATTACCAGTAGGACATAAT
TTTTGGCTCTCCCTATTCAACACAGTGCACAGTTTGACACAGTGGCCTCAGGTTACAGTGCACCATGTCACCTG
TGCTATCCTACGAAATCATTGTTTCTAAGTTGTGTTTATTCCCTGGAGTGACATGCCACCCGAATGGCTCACTT
TCACTGAGGATGCTGTCTCTGATTTAGCTGCTGCCTCCAGCCTCTGGCTTGAGAACTTACTAAAGGCACCTTCCT
TCCTGTAAACCCCTGTTAACTCTCCATAAATTTGGTGATTCTCTGCTAGGCCTAAGATTTTGAGTTAACATCTC
TTGAAGCCAACTCCACCTTCTGTGCTTTTTGCTTGGGATAATGGAGTTTTTCTTTAGAAACAGTGCCAAGAATG
ACAAGATATTAAAAA

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FIGURE 3565

MNIFDRKINF DALLKFSHITPSTQQHLKKVYASFALCMFVAAAGAYVHVMVTHFIQAGLLSALGSLILMIWLMATP
HSHETEQRGLLAGFAFLTGVGLGPALEFCIAVNPSILPTAFMGTAMIFTCFTLSALYARRRSYLFLGGILMSA
LSLLLLSSLGNVFFGSIWLFQANLYVGLVVMCGFVLFDTQLIIEKAEHGDQDYIWHCIDLFLDFITVFRKLMMIL
AMNEKDKKKEKK

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FIGURE 3566

GCGAAGTGAAGGGTGGCCAGGTGGGGCCAGGCTGACTGAATGTATCTCCTAGCTATGGACTAAATAATACATGG
GGGGAAATAAACAGTATTCATGAGGGTGAAAATGTGACCCAGCAGGAAAATTACAACATATTTCAATTGACGTT
GAATAGGATGAGTCATGGAATTTAAGTGATTACTGAAGATTATACTACTGGTAGATAGAAGAGCTAAAGAAAGA
TGGATACTATGATGCTGAATGTGCGGAATCTGTTTGAGCAGCTTGTGCGCCGGGTGGAGATTCTCAGTGAAGGAA
ATGAAGTCCAATTTATCCAGTTGGCGAAGGACTTTGAGGATTTCGTA AAAAGTGGCAGAGGACTGACCATGAGC
TGGGGAAATACAAGGATCTTTTGATGAAAGCAGAGACTGAGCGAAGTGCTCTGGATGTTAAGCTGAAGCATGCAC
GTAATCAGGTGGATGTAGAGATCAAACGGAGACAGAGAGCTGAGGCTGACTGCGAAAAGCTGGAACGACAGATT
AGCTGATTCGAGAGATGCTCATGTGTGACACATCTGGCAGCATTCAACTAAGCGAGGAGCAAAAATCAGCTCTGG
CTTTTCTCAACAGAGGCCAACCATCCAGCAGCAATGCTGGGAACAAAAGACTATCAACCATTGATGAATCTGGTT
CCATTTTATCAGATATCAGCTTTGACAAGACTGATGAATCACTGGATTGGGACTCTTCTTTGGTGAAGACTTTCA
AACTGAAGAAGAGAGAAAAGAGGCGCTCTACTAGCCGACAGTTTGTGATGGTCCCCCTGGACCTGTAAAGAAAA
CTCGTTCCATTGGCTCTGCAGTAGACCAGGGGAATGAATCCATAGTTGCAAAAACCTACAGTGACTGTTCCCAATG
ATGGCGGGCCCATCGAAGCTGTGTCCACTATTGAGACTGTGCCATATTGGACCAGGAGCCGAAGGAAAAACAGGTA
CTTTACAACCTTGGAACAGTGACTCCACCOTGAACAGCAGGCAGCTGGAGCCAAGAACTGAGACAGACAGTGTTGG
GCACGCCACAGAGTAATGGAGGGATGCGCCTGCATGACTTTGTTTCTAAGACGGTTATTAAACCTGAATCCTGTG
TTCCATGTGGAAAGCGGATAAAAATTTGGCAAATTATCTCTGAAGTGTCGAGACTGTGCTGTGGTCTCTCATCCAG
AATGTCGGGACCGCTGTCCCTTCCCTGCATTCTACCTGATAGGAACACCTGTCAAGATTGGAGAGGGGAATGC
TGGCAGACTTTGTGTCCAGACTTCTCCAATGATCCCCTCCATTGTTGTGCTGTTGTAAATGAGATTGAGCAAA
GAGGTCTGACTGAGACAGGCTGTATAGGATCTCTGGCTGTGACCGCACAGTAAAAGAGCTGAAAGAGAAATTC
TCAGAGTGAAAACCTGTACCCCTCCTCAGCAAAGTGGATGATATCCATGCTATCTGTAGCCTTCTAAAAGACTTTC
TTCGAAAACCTCAAAGAACCTCTTCTGACCTTTGCGCTTAACAGAGCCTTTATGGAAGCAGCAGAAATCACAGATG
AAGACAACAGCATAGCTGCCATGTACCAAGCTGTTGGTGAACCTGCCCCAGGCCAACAGGGACACATTAGCTTTCC
TCATGATTCACCTGTCAGAGAGTGCTCAGAGTCCACATACTAAAATGGATGTTGCCAATCTGGCTAAAGTCTTTG
GCCCTACAATAGTGGCCCATGCTGTGCCCAATCCAGACCCAGTGACAATGTTACAGGACATCAAGCGTCAACCCA
AGGTGGTTGAGCGCCTGCTTTCCTTGCCCTCTGGAGTATTGGAGTCAGTTCATGATGGTGGAGCAAGAGAACATTG
ACCCCTACATGTCAATTGAAAACCTCAAATGCCTTTTCAACACCACAGACACCAGATATTAAAGTGAGTTTACTGG
GACCTGTGACCACTCCTGAACATCAGCTTCTCAAGACTCCTTCATCTAGTTCCCTGTACAGAGAGTCCGTTCCA
CCCTCACCAAGAACACTCCTAGATTTGGGAGCAAAAGCAAGTCTGCCACTAACCTAGGACGACAAGGCAACTTTT
TTGCTTCTCCAATGCTCAAGTGAAGTCAACATCTGCCTGTTACTTCCCAGCATTGACTGACTATAAGAAAGGACAC
ATCTGTACTCTGCTCTGCAGCCTCCTGTACTATTACTACTTTTAGCATTCTCCAGGCTTTTACTCAAGTTTAAT
TGTCATGAGGGTTTTATTAAAACTATATATATCTCCCTTCTCTCTCAAGTCACATAATATCAGCACTTTG
TGCTGGTCATTGTTGGGAGCTTTTAGATGAGACATCTTCCAGGGGTAGAAGGGTTAGTATGGAATTGGTTGTGA
TTCTTTTTGGGGAAGGGGGTTATTGTTCTTTGGCTTAAAGCCAAATGCTGCTCATAGAATGATCTTTCTCTAGT
TTCAATTTAGAAGTGATTTCCGTGAGACAATGACAGAAACCTACCTATCTGATAAGATTAGCTTGTCTCAGGGTG
GGAAGTGGGAGGGCAGGGCAAAGAAAGGATTAGACCAGAGGATTTAGGATGCCTCCTTCTAAGAACCAGAAGTTC
TCATTCCCCATTATGAAGTGAGCTATAATATGGAGCTTTTATAAAAATGGGATGCATTGAGGACAGAAGTAGTGA
TGGGAGTATGCGTAGCTTTGATTTGGATGATTAGGTCTTTAATAGTGTTGAGTGGCACAACCTTGTAATGTGAA
AGTACAACCTCGTATTTATCTCTGATGTGCCGCTGGCTGAACCTTTGGGTTCAATTTGGGGTCAAAGCCAGTTTTCT
TTTAAATTTGAATTCATTCTGATGCTTGGCCCCCATACCCCCAACCTTGTCCAGTGGAGCCCAACTTCTAAAGGT
CAATATATCATCTTTGGCATCCCAACTAACAATAAAGAGTAGGCTATAAGGGAAGATTGTCAATATTTTGTGGT
AAGAAAAGCTACAGTCATTTTTTTCTTTGCACTTTGGATGCTGAAATTTTTCCCATGGAACATAGCCACATCTAGA
TAGATGTGAGCTTTTTCTTCTGTTAAATTTATCTTAATGTCTGTAAAAACGATTTTCTTCTGTAGAAATGTTTGA
CTTCGTATTGACCCTTATCTGTAAACACCTATTTGGGATAATATTGGAAAAAAGTAAATAGCTTTTTTCAAAA
TGAAAAA

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FIGURE 3567

MDTMMMLNVRNLFQVLVRRVEILSEGNEVQFIQLAKDFEDFRKKWQRTDHELKGYKDLLMKAETERSALDVKLKHA
RNQVDVEIKRRQRAEADCEKLERQIQLIREMLMCDTSGSIQLSEEQKSALAFNLRGQPSSSNAGNKRLSTIDESG
SILSDISFDKTDES LDWDSSLVKTFKLKKREKRRSTSRQFVDGPPGPVKKTRSIGSAVDQGNESIVAKTTVTVPN
DGGPIEAVSTIETVPYWTRSRRTGTLPWNSTLNSRQLEPRTE TDSVGT PQSNGGMLHDFVSKTVIKPESC
VPCGKRIKFGKLSLKCRDCRVVSHPECRDRCPLPCIPTLIGTPVKIGEGMLADFVSQTSPMIPSI VVHCVNEIEQ
RGLTETGLYRISGCDRTVKELKEKFLRVKTVPLLSKVDDIHAICSLKDFLRNLKEPLLTFRLNRAFMEAAEITD
EDNSIAAMYQAVGELPQANRDTLAF LMIHLQRVAQSPHTKMDVANLAKVFGPTIVAHAVPNPD PVTMLQDIKRQP
KVVERLLSLPLEYWSQFMMVEQENIDPLHVIENSNAFSTPQTPDIKVSLLGPVTTPEHQLLKT PSSSSLSQRVRS
TLTKNTPRFGSKSKSATNLGRQGNFFASPMLK

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FIGURE 3568

CTATCCCATAGTCTCGCTGCCCTGAGCCTCCCGTGCCGGCCGGCCGGCCGGGGGAACAGGCGGGCGCTCGGGGGG
CGCTCGGGGGGGCGGGGGGAGTTCCGGTTCGGTTCCTTGTGCGGCTGCATCGGCGGCTCCGGGAAGATGGCGGGC
CGGGCGGGTTTCCAGTCTGTGGCTCCAAGCGGCGGGCCGGAGCCTCAGGAGGGGCGGGCGGGCTGCTGCCTTG
GGCCCGGGCGGAACCTCCGGGGCCTCCTGTGCGAATGGGCCCCGGCTCCGGGTCAAGGGCTGTACCGCTCCCCGATG
CCCGGAGCGGCCTATCCGAGACCAGGTATGTTGCCAGGCAGCCGAATGACACCTCAGGGACCTTCCATGGGACCC
CCTGGCTATGGGGGGAACCTTCAGTCCGACCTGGCCTGGCCCCAGTCAGGGATGGATCAGTCCCGCAAGAGACCT
GCCCCCTCAGCAGATCCAGCAGGTCCAGCAGCAGGCGGTCCAAAATCGAAACCACAATGCAAAGAAAAGAAGATG
GCTGACAAAATTCTACCTCAAAGGATTCTGTAACTGGTACCAGAATCCCAGGCCTATATGGATCTCTTGGCTTTT
GAAAGGAACTGGACCAGACTATCATGAGGAAACGGCTAGATATCCAAGAGGCCTTGAAACGTCCCATCAAGCAA
AAACGGAAGCTGCGAATTTTCACTTTCTAACACTTTCAATCCGGCTAAGTCAGATGCCGAGGATGGGGAAGGGACG
GTGGCTTCTGGGAGCTTCGGGTAGAAGGACGGCTCCTGGAGGATTACAGCCTTGTCCAAATATGATGCCACTAAA
CAAAGAGGAAGTTCTCTTCTTTTAAAGTCCTTGGTGATTGAACTGGACAAAGACCTGTATGGGCCAGACAAC
CATCTGGTAGAATGGCACAGGACCGCCACTACCCAGGAGACCGATGGCTTTCAGGTGAAGCGGCGGGGAGACGTG
AATGTACGGTGTACTGTCTACTGATGCTGGATTACCAGCCTCCCCAGTTTAAATTAGACCCCCGCTAGCTCGA
CTCCTGGGCATCCATACCCAGACTCGTCCAGTGATCATCCAAGCACTGTGGCAATATATTAAGACACATAAGCTC
CAGGACCCTCACGAGCGGGAGTTTGTATCTGTGACAAGTACCTGCAGCAGATCTTTGAGTCTCAACGTATGAAG
TTTTAGAGATCCCTCAGCGGCTCCATGCCTTGCTTATGCCACCAGAACCTATCATCATTAAATCATGTATCAGT
GTTGACCCGAATGATCAGAAAAAGACAGCTTGTATGACATTGATGTTGAAGTGGATGACACCTTGAAGACCCAG
ATGAATCTTTTCTGCTGTCCACTGCCAGCCAACAGGAGATTGCTACTCTAGACAACAAGATCCATGAGACAATA
GAAACCATCAACCAGCTGAAGACTCAGCGGGAGTTCATGCTGAGCTTTGCCAGAGACCCTCAGGGTTTCATCAAT
GACTGGCTTCAGTCCAGTGCAGGGACCTCAAGACAATGACTGATGTGGTGGGTAACCCAGAGGAGGAGCGCCGA
GCTGAGTTCTACTTCCAGCCCTGGGCTCAGGAGGCTGTGTGCCGATACCTTCTACTCCAAGGTGCAGCAGAGACGA
CAAGAATTAGAGCAAGCCCTGGGAATCCGGAATACATAGGGCCTCTCCACAGCCCTGATTGACTGCACCAATT
CTTGATTGGGGCCCTGTGCTGCCTGCCTCAGTCTGCCTTGGTCTTGGCTTGGGGCGTTCCAGGGGATGCTGT
TGGTTCAAGGACAACACCAGAATGAAGAGGGTCTCACAAGACACCTGTTATCCTCTTCTTTACCCTATCTCTTC
CCACCCCAAGCTTCCCTTTGCCCCACAAAGTTCCCATGTGCCTGTACCCTCCCCTGGTCTACATAGGACCTCTAG
ATAGTGTAGAGAGAGAAACATGTAGTGGTAATGAGTGCTTGGAAATGGATTGGGCCTCAGGCCAGGTGGTCTTCAA
GGGGACCAGCTAACTGATCCTGCCCTTCAGAGACCCAGGAGTTGGGAGCTTTGCTCCTTCTCCAAGACTCAGGC
CTGTGGGCACCTCTATAAGCTAGTTGATCTTGGCTCTCCTGATAACAGAATCCAATTTCTTCTTCCCTCCACAG
GTTTGGAAACAACTCTCCCTTCACCTTGTGCTGTAGCACTACAGAAACCCTGGTTCTTGGGCTCCACTGAGCC
CCAGGTGAGTCCCCAGCCCTCTGGGTTGGCCTGCTGTGACTGCTTCTCTCACTCCTTAGTTGGGGTCCACATCAG
TATTGGAGTTTTGTTCTTTATTGCTCCCTCCAGACACTCCCTGTGGCTGCCCTTTGTGATTCCCTCAGATCTGC
CCTAATCCCGGCATTTGGGTGGGGGAATCTTGCTTTCCCTTTTCCAGAGCCCAGGGATCTCATCTGGGGAAGT
TCATTGCCAGCAGAGGCTGTTCTTCTGCTGTTTGGAGATGTGACTCATTCACTCACTCCACCCTGCCTC
TGCATCCCTTAATGGAGAAACGGGCCTAAACCAAACGGGTAAAAGCCCTGGGCCATCCCTGTCTTCTGTCCC
TTGTCTGCCCAGTTGACACCTACTGGTGACTTCTAGGGCACTGAGGAGTGAAAGCGCCTAGGGCTGGAGAATAGC
GCTGAGTTGGGTTTGTGACTCTTCCCTCTCCCTGCCTCACAGGATTGTGACTCCCCAGCCCTGCCCTCAAAGCT
TCAGACCCCTCAGGTAGCAGCAGGACCTTGTGATCTTGGCCCCCTGGATCTGAGATGGTTTTTGCATCTTCCAG
GAGAGCCTCACATTCTTCTCCAGGTTGTATACCCCCGAGTTAGCATATCCAGGCTCGCAGACTCAACACAGC
AAGGGTGGGAGACAGCTGGGCACAAAGGGGGAATTCGTTTCCAGCATGGGCTCTAAACCCACAGAAGTACAAAGC
CCCTGCTTCCCCACCCCTCCTCAGGCTCCTGCGAGCACACCCCCACCCCAATCCCTCCCTGTTCTACACTGG
GGACAGCAGAATTTTCTCCCGCTTCTCCCTTCCCTGCCATTTTCCCTCCCTTGAAAGGTTGACACTGGACAACCT
TGGGGCAGCTGAGCCCTGGCCGCCTCCTGGCTGGAACCATGAGAAGGAAGCTCAGTACTTCCCACAGTGTCCCTG
TTGATAACTGTTTTTATTAAGTGAATTGTTTTTTCATGGACCAAACCTTTTTTTTGTACTGTCCCTTATTGATG
TTACCCAGTTTTTAATAAAAGAATCTTCTGAAAAAAAAAAAAAAAAAAAA

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FIGURE 3569

MGPAPGQGLYRSPMPGAAYPRPGMLPGSRMTPQGFSMGPPGYGGENPSVRPGLAQSGMDQSRKRPAPOQIQQVQQQ
AVQNRNHNAKKKKMADKILPQRIRELVPEAQAYMDLLAFERKLDQTIMRKRLDIQEALKRPIKQKRKLRI F I SNT
FNPAKSDAEDGEGETVASWELRVEGRLEDSALSKYDATKQKRKFSSFFKSLVIELDKDLYGPDNHLVEWHRTATT
QETDGFQVKRPGDVNVRCTVLLMLDYQPPQFKLDPRLARLLGIHTQTRPVIIQALWQYIKTHKLQDPHEREFVIC
DKYLQQIFESQRMKFSEIPQRLHALLMPPEPIIINHVISVDPNDQKKTACYDIDVEVDDTLKTQMNSFLLSTASQ
QEIATLDNKIHETIETINQLKTQREFMLS FARDPQGFINDWLQSQCRDLKTMTDVVGNP EEEERRAEFYFQPWAE
AVCRYFYSKVQRRQELEQALGIRNT

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FIGURE 3570

TGCACTGTGACTCAGGCCTTCCCATCAGGCCTATTTGTCTACCCAATAAAGCGTGTTTTTCCAGAAACAAGAAG
AGTTGGGAGAGGGAGCTTCAGTGCATGTGGCAGTGCCTGTGCTGGCGCGTATCATTGCACAGCTTGGCTCGCCAA
AGACCCTCCCTCGAGGGAGAGAAACCACAGCCCCAGAATTCAGCGGGCCTCTCCGAGAGCACGGCGCGTCTGAG
GATGCGTATGTTGACCCGAATGATCAGAAAAAGACAGCTTGTTATGACATTGATGTTGAAGTGGATGACACCTTG
AAGACCCAGATGAATTCTTTTCTGCTGTCCACTGCCAGCCAACAGGAGATTGCTACTCTAGACAACAAGATCCAT
GAGACAATAGAAACCATCAACCAGCTGAAGACTCAGCGGGAGTTCAIGCTGAGCTTTGCCAGAGACCCCTCAGGGT
TTCATCAATGACTGGCTTCAGTCCCAGTGCAGGGACCTCAAGACAATGACTGATGTGGTGGGTAAACCCAGAGGAG
GAGCGCCGAGCTGAGTTCTACTTCCAGCCCTGGGCTCAGGAGGCTGTGTGCCGATACTTCTACTCCAAGGTGCAG
CAGAGACGACAAGAATTAGAGCAAGCCCTGGGAATCCGGAATACATAG

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FIGURE 3571

GTACCTCACGGAAGCCGGCTTTGGCCCTGCGGCTGCTACCGTCGCCGCGGAGAAATTGTTGGATCTGGCAGTCTA
GGAATGAATCTCCTCTCAGCCTTTAAGCTCACCTGGTCAGAATCCTTGGATGAGCCTGTGGGACCGTTTCCTCCTA
GCCCCGTGGTTTGGAAACCAGTGGCTTTGGGACTGTAAGAGGATGGACAAAGATTCTCAGGGGCTGCTAGATTTCAT
CCCTGATGGCATCAGGCACTGCCAGCCGCTCAGAGGATGAGGAGTCACTGGCAGGGCAGAAGCGAGCCTCCTCCC
AGGCCCTTGGGCACCATCCCTAAACGGGAGAAGCTCCTCCAGGTTTCATCAAGAGGAAGAAGTTCGATGATGAGCTGG
TGGAGAGCAGCCTGGCAAAATCTTCTACCCGGGCAAAGGGGGCCAGTGGGGTGGAAACCAGGGCGCTGTTTCGGGGA
GTGAACCTCCTCCAGTGAGAAGAAGAAGGTATCCAAAGCCCCCAGCACTCCTGTGCCACCCAGCCCAGCCCCAG
CCCCTGGACTCACCAAGCGTGTGAAGAAGAGTAAACAGCCACTTCAGGTGACCAAGGATCTGGGCCGCTGGAAGC
CTGCAGATGACCTCCTGCTCATAAATGCTGTGTTGCAGACCAACGACCTGACCTCCGTCCACCTGGGCGTGAAAT
TCAGCTGCCGCTTCACCCCTTCGGGAGGTCCAGGAGCGTTGGTACGCCCTGCTCTACGATCCTGTCTCATCTCCAAGT
TGGCCTGTGAGGCCATGAGGCAGCTGCACCCAGAGGCTATTGCAGCCATCCAGAGCAAGGCCCTGTTTAGCAAGG
CTGAGGAGCAGCTGCTGAGCAAAGTGGGATCGACCAGCCAGCCCACCTTGGAGACCTTCAGGACCTGCTGCACA
GACACCCTGATGCCTTCTACCTGGCCCCGTACCGCGAAGGCCCTGCAGGCCCACTGGCAGCTCATGAAGCAGTATT
ACCTGCTGGAGGACCAGACAGTGCAGCCGCTGCCCAAAGGGGACCAAGTGCTGAACTTCTCTGATGCAGAGGACC
TGATTGATGACAGTAAGCTCAAGGACATGCGAGATGAGGTCTTGGAAACATGAGCTGATGGTGGCTGACCGGCGCC
AGAAGCGAGAGATTCCGGCAGCTGGAACAGGAAGTGCATAAGTGGCAGGTGCTAGTGGACAGCATCACAGGCATGA
GCTCTCCGGAATTCGACAACCAGACACTGGCAGTGCTGCGGGGCGCATGGTGCGGTACCTGATGCGCTCGCGTG
AGATCACCCCTGGGCAGAGCAACCAAGGATAACCAGATTGATGTGGACCTGTCTCTGGAGGGTCCGGCCTGGAAGA
TATCCCGAAACAAGGTGTCTATCAAGCTGAAGAACAACGGTGATTTCTTCATTGCCAATGAGGGTCGACGGCCCA
TCTACATCGATGGACGGCCGGTGCTCTGTGGCTCCAAATGGCGCCTCAGCAACAACCTCTGTGGTGGAGATCGCCA
GCCTGCGATTTCGTCTTCCTTATCAACCAGGACCTCATTGCCCTCATCAGGGCTGAGGCTGCCAAGATCACACCAC
AGTGAGGAGTGGTGGCAGGACTCGTGGGCCCTCTCCGGCCTGTTTCCCCTGCCACTCCAGCCCCCTTGAGCTGGG
AACTCAGGCTCCTGGAAAAACCTGGGCAGTGGGAGGCTCAGCTGCGGGCCATTGATTTGAGCCTTTGAGGGAGGA
TAGGGCTGGCCTTTGTGAAGCCAGCAGAGGCTGAGAACCTCAGGCTTCCCTAGATCCAGAGCCCCCTCCCCATCTT
CCTCTCTCTAAAAACAACCCCTACCCCCCATTGCCACCTTCACTCCTGTGTCTCCAGCTGATTAGCCTCAGACTCT
TCTTTTATTGTTTTTCTTTTGTAATAAAAAGCACCAGGTTCC

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FIGURE 3572A

GGCACGAGGCGCTAGGTAGAGCGCCGGGACCTGTGACAGGGCTGGTAGCAGCGCACAGGAAAGCGGGCTTTTAGC
CAGGTATTTTCAGTGTCTGTAGACAAGATGGAATCATCTCCATTTAATAGACGGCAATGGACCTCACTATCATTGA
GGGTAACAGCCAAAGAACTTTCTCTTGTCAACAAGAACAAGTCATCGGCTATTGTGGAAATATTCTCCAAGTACC
AGAAAGCAGCTGAAGAAACAAACATGGAGAAGAAGAGAAGTAACACCGAAAAATCTCTCCAGCACTTTAGAAAGG
GGACCTGACTGTGTAAAGAAGAAGTGGGAGAACCCAGGGCTGGGAGCAGAGTCTCACACAGACTCTCTACGGA
ACAGCAGCACTGAGATTAGGCACAGAGCAGACCATCTCTCTGTGAAGTGACAAGCCACGCTGCTTCTGGAGCCA
AAGCTGACCAAGAAGAACAATCCACCCAGATCTAGACTCAGGTACCTCTGAAGCCCTCGTTTCAGGGTCGAT
ATCCCCACATCAAGGACGGTGAGGATCTTAAAGACCACTCAACAGAAAGTAAAAAATGGAAAATTGTCTAGGAG
AATCCAGGCATGAAGTAGAAAAATCAGAAATCAGTGAAAAACACAGATGCTTCGGGCAAAATAGAGAAATATAATG
TTCCGCTGAACAGGCTTAAGATGATGTTTGAGAAAGGTGAACCAACTCAAATAAGATTCTCCGGGCCCAAAGCC
GAAGTGCAAGTGGAAGGAAGATCTCTGAAAAACAGCTATTCTCTAGATGACCTGGAAATAGGCCCAGGTCAAGTGT
CATCTTCTACATTTGACTCGGAGAAAAATGAGAGTAGACGAAATCTGGAACCTCCACGCCTCTCAGAAACCTCTA
TAAAGGATCGAATGGCCAAGTACCAGGCAGCTGTGTCCAAACAAAGCAGCTCAACCAACTATACAAATGAGCTGA
AAGCCAGTGGTGGCGAAATCAAATTCATAAAATGGAGCAAAAGGAGAATGTGCCCCAGGTCTGAGGTCTGCA
TCACCCATCAGGAAGGGGAAAAAGATTTCTGCAAATGAGAATAGCCTGGCAGTCCGTTCCACCCCTGCCGAAGATG
ACTCCCGTGAATCCAGGTAAAGAGTGAGGTTCAACAGCCTGTCCATCCCAAGCCACTAAGTCCAGATTCCAGAG
CCTCCAGTCTTTCTGAAAGTTCTCTCCCAAAGCAATGAAGAAGTTTCAGGCACCTGCAAGAGAGACCTGCGTGG
AATGTGAGAAGACAGTCTATCCAATGGAGCGTCTCTTGGCCAACCAGCAGGTGTTTCACATCAGCTGCTTCCGTT
GCTCCTATTGCAACAACAACTCAGTCTAGGAACATATGCATCTTTACATGGAAGAATCTATTGTAAGCCTCACT
TCAATCAACTCTTTAAATCTAAGGGCAACTATGATGAAGGCTTTGGGCACAGACCACACAAGGATCTATGGGCAA
GCAAAAATGAAAACGAAGAGATTTTGGAGAGACCAGCCAGCTTGCAAATGCAAGGGAGACCCCTCACAGCCCAG
GGGTAGAAGATGCCCCATTGTCTAAGGTGGGTGTCTGGCTGCAAGTATGGAAGCCAAGGCCTCCTCTCAGCAGG
AGAAGGAAGACAAGCCAGCTGAAACCAAGAAGCTGAGGATCGCCTGGCCACCCCCACTGAACTTGAAGTTTCA
GAAGTGCCTTGGAGGAAGGGATCAAAATGTCAAAGCCCAAATGGCCTCCTGAAGACGAAATCAGCAAGCCCGAAG
TTCTTGAGGATGTCTGATCTAGATCTGAAGAAGCTAAGACGATCTTCTTCACTGAAGGAAAGAAGCCGCCATTCA
CTGTAGCAGCTTCAATTTCAAAGCACCTCTGTCAAGAGCCCAAACTGTGTCCCCACCTATCAGGAAAGGCTGGA
GCATGTGAGAGCAGATGAAGAATCTGTGGGTGGAAGAGTTGCAGAAAGGAAACAAGTGGAAAATGCCAAGGCTT
CTAAGAAGAATGGGAATGTGGGAAAAACAACCTGGCAAAACAAGAATCTAAAGGAGAGACAGGGAAGAGAAGTA
AGGAAGGTATAGTTTGGAGATGGAGAATGAGAATCTGTGAAAAATGGTGCAGACTCCGATGAAGATGATAACA
GCTTCTCTCAAACAACAATCTCCACAAGAACCCAAGTCTCTGAATTGGTTCGAGTTTGTAGACAACACCTTTGCTG
AAGAATTCATACTCAGAATCAGAAATCCAGGATGTGGAACCTTGGGAGGGAGAAGTGGTCAAAGAGCTCTCTG
TGGAGAAGACAGATAAAGAGAAATCGGTATTATGATGAGGATGAGGATGAAGAGTGACAAATGCAATGATGCTGG
GCCTTAAATTCATGTTAGTGTAGCGAGCCACTGCCCTTTGTCAAATGTGATGCACATAAGCAGGTATCCCAGC
ATGAAATGTAATTTACTTGAAGTAACCTTTGAAAAGAATTCTTCTTAAATCAAAAACAAAACAAAAAACAC
AAAAACACATTCTAAATACTAGAGATAACTTTACTTAAATCTTCAATTTAGCAGTGATGATATGCATAAGTGC
TGTAAGGCTGTAACTGGGGAAATATTCCACCTGATAATAGCCCAGATTCTACTGTATTCCCAAAAGGCAATATT
AAGGTAGATAGATGATTAGTAGTATATTGTTACACACTATTTTGAATTAGAGAACATACAGAAGGAATTTAGGG
GCTTAAACATTACGACTGAATGCACCTTTAGTATAAAGGACACAGTTTGTATATTTTTAAATGAATACCAATTTAA
TTTTTTAGTATTTACCTGTTAAGAGATTATTTAGTCTTTAAATTTTTTAGGTTAATTTTCTTGCTGTGATATATA
TGAGGAATTTACTACTTTATGTCTGCTCTCTAAACTACATCCTGAACTCGACGTCCTGAGGTATAATACAACAG
AGCACTTTTTGAGGCAATTGAAAAACCAACCTACACTCTTCGGTGCTTAGAGAGATCTGCTGTCTCCCAAATAAG
CTTTTGTATCTGCCAGTGAATTTACTGTACTCCAAATGATTGCTTTCTTTTCTGGTGATATCTGTGCTTCTCATA
ATTACTGAAAGCTGCAATATTTTAGTAATACCTTCGGGATCACTGTCCCCATCTTCCGTGTTAGAGCAAAGTGA
AGAGTTTAAAGGAGGAAGAAGAAAGAACTGTCTTACACCACTTGAGCTCAGACCTCTAAACCCTGTATTTCCCTT
ATGATGTCCCTTTTTGAGACACTAATTTTTAAATACTTACTAGCTCTGAAATATATTGATTTTTATCACAGTAT
TCTCAGGGTGAAATTAACCAACTATAGGCCTTTTTCTTGGGATGATTTTCTAGTCTTAAGGTTTGGGGACATTA
TAACTTGAGTACATTTGTTGTACACAGTTGATATCCAAATTGTATGGATGGGAGGGAGAGGTGTCTTAAGCTG
TAGGCTTTCTTTGTACTGCATTTATAGAGATTTAGCTTTAATATTTTTTAGAGATGTAAACATTCTGCTTTCT

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FIGURE 3572B

TAGTCTTACCTAGTCTGAAACATTTTTATTCAATAAAGATTTTAATTAAAATTTG

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FIGURE 3573

MESSPFNRRQWTSLSLRVTAKELSLVNKNKSSAIVEIFSKYQKAAEETNMEKKRSNTENLSQHFRKGTLTVLKKK
WENPGLGAESHTDSLRSSTEIRHRADHPPAEVTSHAASGAKADQEEQIHPRSRRLRSPPEALVQGRYPHIKDGED
LKDHSTESKKMENCLGESRHEVEKSEISENTDASGKIEKYNVPLNRLKMMFEKGEPTQTILRAQSRASGRKIS
ENSYSLDDLEIGPGQLSSSTFDSEKNESRRNLELPRLSETSIKDRMAKYQAAVSKQSSSTNYTNELKASGGEIKI
HKMEQKENVPPGPPEVCITHQEGEKISANENSLAVRSTPAEDDSRDSQVKSEVQQPVHPKPLSPDSRASSLSESSP
PKAMKKFQAPARETCVECQKTVYPMERLLANQQVFHISCFRCSYCNNKLSLGTYSASLHGRIYCKPHFNQLFKSKG
NYDEGFGHRPHKDLWASKNENEEILERPAQLANARETPHSPGVEDAPIAKVGVLAAASMEAKASSQQEKEDKPAET
KKLRIAWPPPTELGSSGSALEEGIKMSKPKWPPPEDEISKPEVPEDVDLDLKKLRRSSSLKERSRPFTVAASFQST
SVKSPKTVSPPIRKGWSMSEQSEESVGGRVAERKQVENAKASKKNGNVGKTTWQNKESKGETGKRSKEGHSLEME
NENLVENGADSDDDNSFLKQQSPQEPKSLNWSSFVDNTFAEEFTTQNKQSQDVELWEGEVVKELSVEEQIKRNR
YYDEDEDEE

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FIGURE 3574

ATGGAAGATTCCCACAAGAGTACCACGTCAGAGACAGCACCTCAACCTGGTTTCAGCAGTTT CAGGGAGCTCACATT
TCTCATATTGCTCAACAGGTATCATCTTTATCAGAAAGTGAGGAGTCCCAGGACTCATCCGACAGCATAGGCTCC
TCACAGAAAGCCCACGGGATCCTAGCACGGCGCCCATCTTACAGAAAAATTTTGAAAGACTTATCTTCTGAAGAT
ACACGGGGCAGAAAAGGAGACGGAGAAAATTCTGGAGTTTCTGCTGCTGTCACCTTCTATGTCTGTTCCAAC TCCC
ATCTATCAGACTAGCAGCGGACAGTACATTGCCATTGCCCCAAATGGAGCCTTACAGTTGGCAAGTCCAGGCACA
GATGGAGTACAGGGACTTCAGACATTAACCATGACAAATTCAGGCAGTACTCAGCAAGGTACAAC TATTCTTCAG
TATGCACAGACCTCTGATGGACAGCAGATACTTGTGCCCAGCAATCAGGTGGTTCGTACAAACTGCATCAGGAGAT
ATGCAAACATATCAGATCCGAACTACACCTTCAGCTACTTCTCTGCCACAAACTGTGGTGATGACATCTCCTGTG
ACTCTCACCTCTCAGACAACTAAGACAGATGACCCCCAATTGAAAAGAGAAATAAGGTTAATGAAAAACAGAGAA
GCTGCTCGAGAATGTCGCAGAAAGAAGAAAGAATATGTGAAATGCCTGGAAAACCGAGTTGCAGTCCTGGAAAAT
CAAAATAAAACTCTAATAGAAGAGTTAAAAACTTTGAAGGATCTTTATTCCAATAAAAGTGTTTGA

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FIGURE 3575

MEDSHKSTTSETAPQPGSAVQGAHISHIAQQVSSLSESEESQDSSDSIGSSQKAHGILARRPSYRKILKDLSSD
TRGRKGDGENSGVSAAVTSMVPTPIYQTSSGQYIAIAPNGALQLASPGTDGVQGLQTLTMTNSGSTQQGTTILQ
YAQTS DGQQILVPSNQVVQTASGDMQTYQIRTPSATSLPQTVVMTSPVTLTSQTTKTDDPQLKREIRLMKNRE
AARECRRKKKEYVKCLENRVAVLENQNKTLIEELKTLKDLYSNKSV

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FIGURE 3576

GTTTTTTTCCCTTCTGAGCAATGGAGCTTACCATCTTTATCCTGAGACTGGCCATTTACATCCTGACATTTCCCT
TGTACCTGCTGAACCTTTCTGGGCTTGTGGAGCTGGATATGCAAAAAATGGTTCCCCTACTTCTTGGTGAGGTTCA
CTGTGATATACAACGAACAGATGGCAAGCAAGAAGCGGGAGCTCTTCAGTAACCTGCAGGAGTTTGCGGGCCCCCT
CCGGGAAACTCTCCCTGCTGGAAGTGGGCTGTGGCAGCGGGGCCAACTTCAAGTTCTACCCACCTGGGTGCAGGG
TGACCTGTATTGACCCCAACCCCAACTTTGAGAAGTTTTTGATCAAGAGCATTGCAGAGAACCGACACCTGCAGT
TTGAGCGCTTTGTGGTAGCTGCCGGGGAGAACATGCACCAGGTGGCTGATGGCTCTGTGGATGTGGTGGTCTGCA
CCCTGGTGCTGTGCTCTGTGAAGAACCAGGAGCGGATTCTCCGCGAGGTGTGCAGAGTGCTGAGACCGGGAGGGG
CTTTCTATTTTATGGAGCATGTGGCAGCTGAGTGTTTCGACTTGGAACTTACTTCTGGCAACAAGTCCTGGATCCTG
CCTGGCACCTTCTGTTTGTATGGGTGCAACCTGACCAGAGAGAGCTGGAAGGCCCTGGAGCGGGCCAGCTTCTCTA
AGCTGAAGCTGCAGCACATCCAGGCCCACTGTCTCTGGGAGTTGGTGCGCCCTCATATCTATGGATATGCTGTGA
AATAGTGTGAGCTGGCAGTTAAGAGCTGAATGGCTCAAAGAATTTAAAGCTTCAGTTTACATTTAAAATGCTAA
GTGGGAGAAGAGAAACCTTTTTTTTGGGGGGCGGTTTTTTTGGTTTTGTTGTTGGTTTTTTTTTTTTTTTGGCAA
GACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAGAAGTAGAGACAGGGAGACAGGGTCTCACTGTGTGCCTAG
GCCGGTCTTGAACTCCTGGGCTCAAGTGATTCTCCACCTTGACCTCCTAAATTGTTGGGATTACAGGTGTGAGA
CAGTGCACCTGGCCGAAATAGCTCAAGTTTCTGAAAAACAAATCTGAATCTATTTGTTATTCTTAGCGTCACTGG
TCTGGCTTTTCAGAATTAACATACAAGGTGGCACACCTAGTTCTGCCAGCTTTATGTCTTTTATTCAGTATTC
CACCAGGTTTGTCTTCTGCATTCCAGTTCTCAAGTCTTAAGATAAAGATTGTACTTGACAGTTTAGTATATCC
ATAAACTATTTGAGGTGGTTAAGGTCTTGGGTTCAATTTTCTTAATACTTTGCTGAATATTGTAGATTGTAGG
CAATGAAAAAGTCTACTAAATTAGGAAAACCTTGAATAATTAGGTATCCTAGGTAAAGAGCCCCCTAAACATCAAGC
AATCTGTGAGTCTGTAAAGAAATAAATATTTTTTGGATTATTCTTATCTAATTCCACCCCTGTTGGAAGATGATT
TCTTTGTTCTTTGCAACTATGGAAGCTGTGAAAATCATCACAAGTGCCTCTGAAAGCGAGTGTTAGGTTGGTTAG
AGGGTTTAAATATTTTCTGCAATGGTTTGTAGGAATTTTAAATAAATGTAGTATATTTTCTGAGATGATTTTGTAAA
AGTACTATTTTAAATATCAAATCAACCAATAAATTCACATTTGTGTTAGGAACAG

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FIGURE 3577

MELTIFILRLAIYILTFPLYLLNFLGLWSWICKKWFPYFLVRFTVIYNEQMASKKRELF SNLQEFAGPSGKLSLL
EVGCGTGANFKFYPPGCRVTCIDPNPNFEKFLIKSIAENRHLQFERFVVAAGENMHQVADGSVDVVVCTLVLCV
KNQERILREVCRLRPGGAFYFMEHVAAECSTWNYFWQQVLDPAWHLLFDGCNLTRESWKALERASFSLKLQHI
QAPLSWELVRPHIYGYAVK

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FIGURE 3578

CAGCCCTCTCATCTCCTGGAACCATGGCCAGCACATCCACCACCATCAGGAGCCACAGCAGCAGCCGCCGGGGTT
TCAGTGCCAACTCAGCCAGGCTCCCTGGGGTCAGCCGCTCTGGCTTCAGCAGCATCTCCGTGTCCCGCTCCAGGG
GCAGTGGTGGCCTGGGTGGTGCATGTGGAGGAGCTGGCTTTGGCAGCCGCAGTCTGTATGGCCTGGGGGGCTCCA
AGAGGATCTCCATTGGAGGGGGCAGCTGTGCCATCAGTGGCGGCTATGGCAGCAGAGCCGGAGGCAGCTATGGCT
TTGGTGGCGCCGGGAGTGGATTGGTTTCGGTGCTGGAGCCGGCATTGGCTTTGGTCTGGGTGGTGGAGCCGGCC
TTGCTGGTGGCTTTGGGGGCCCTGGCTTCCCTGTGTGCCCCCTGGAGGCATCCAAGAGGTCACCGTCAACCAGA
GTCTCCTGACTCCCCTCAACCTGCAAATTGACCCCGCCATCCAGCGGGTGCGGGCCGAGGAGCGTGAGCAGATCA
AGACCCTCAACAACAAGTTTGCCTCCTTCATCGACAAGGTGCGGTTTCCTAGAGCAGCAGAACAAGGTTCTGGACA
CCAAGTGGACCCTGCTGCAGGAGCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTTCGAGCAGTACA
TCAACAACCTCAGGAGGCAGCTGGACAACAT

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FIGURE 3579

CCTGCCTCTCGCTCCAGCCTCCAACGCTCGCCACAGCCCTCTCATCTCCTGGAACCATGGCCAGCACATCCACC
ACCATCAGGAGCCACAGCAGCAGCCGCCGGGGTTTCAGTGCCAACCTCAGCCAGGCTCCCTGGGGTCAGCCGCTCT
GGCTTCAGCAGCATCTCCGTGTCCCGCTCCAGGGGCAGTGGTGGCCTGGGTGGTGCATGTGGAGGAGCTGGCTTT
GGCAGCCGCAGTCTGTATGGCCTGGGGGGCTCCAAGAGGATCTCCATTGGAGGGGGCAGCTGTGCCATCAGTGGC
GGCTATGGCAGCAGAGCCGGAGGCAGCTATGGCTTTGGTGGCGCCGGGAGTGGATTTGGTTTCGGTGGTGGAGCC
GGCATTGGCTTTGGTCTGGGTGGTGGAGCCGGCCTTGCTGGTGGCTTTGGGGGCCCTGGCTTCCCTGTGTGCCCC
CCTGGAGGCATCCAAGAGGTCACCGTCAACCAGAGTCTCCTGACTCCCCTCAACCTGCAAATTGACCCCGCCATC
CAGCGGGTGC GGCGCCGAGGAGCGTGAGCAGATCAAGACCCTCAACAACAAGTTTGCTCCTTCATCGACAAGGTG
CGGTTCCCTAGAGCAGCAGAACAAGGTTCTGGACACCAAGTGGACCTGCTGCAGGAGCAGGGCACCAAGACTGTG
AGGCAGAACCTGGAGCCGTTGTTTCGAGCAGTACATCAACAACCTCAGGAGGCAGCTGGACAGCATCGTCGGGGAA
CGGGGCCGCTGGACTCGGAGCTGAGAAACATGCAGGACCTGGTGGAGGACCTCAAGAACAAATATGAGGATGAA
ATCAACAAGCGCACAGCAGCAGAGAATGAATTTGTGACTCTGAAGAAGGATGTGGATGCTGCCTACATGAACAAG
GTTGAAGTGAAGCCAAGGCAGACACTCTCACAGATGAGATCAACTTCCCTGAGAGCCTTGTATGATGCAGAGCTG
TCCAGATGCAGACCCACATCTCAGACACATCCGTGGTGTCTATCCATGGACAACAACCGCAACCTGGACCTGGAC
AGCATCATCGCTGAGGTCAAGGCCCAATACGAGGAGATTGCTCAGAGGAGCCGGGCTGAGGCTGAGTCTGGTAC
CAGACCAAGTACGAGGAGCTGCAGGTACAGCAGGCAGACATGGGGACGACCTGCGCAACACCAAGCAGGAGATT
GCTGAGATCAACCGCATGATCCAGAGGCTGAGATCTGAGATCGACCATGTCAAGAAGCAGTGTGCCAGCCTGCAG
GCTGCCATTGCTGATGCTGAGCAGCGTGGGGAGATGGCACTCAAGGATGCTAAGAACAAGCTGGAAGGGCTGGAG
GATGCCCTGCAGAAAGGCCAAGCAGGACCTGGCCCGGCTGCTGAAGGAGTACCAGGAGCTGATGAATGTCAAGCTG
GCCCTGGATGTGGAGATCGCCACCTACCGCAAGCTGCTGGAGGGCGAGGAGTGCAGGCTGAATGGCGAAGGCGTT
GGACAAGTCAACGTCTCTGTAGTACAGTCCACCATCTCCAGTGGCTATGGCGGTGCCAGCGGTGTCCGCAGTGGC
TTAGGCCTGGGTGGAGGAAGCAGCTACTCCTATGGCAGTGGTCTTGGCATTGGAGGTGGCTTCAGTTCCAGCAGT
GGCAGAGCCATTGGGGGTGGCCTCAGCTCTGTTGGAGGCGGCAGTTCCACCATCAAGTACACCACCACCTCCTCC
TCCAGCAGGAAGAGCTACAAGCACTAAAGTGCTGCCTCCAGCTCTCGGTCCCACAGTCCTCAGGCCCTTCTCTGG
CTGCAGAGCCGTCTCCTCAGGTTGCCTATCCTCTCCTGGCCTCTAGTCTTCCCTGCTCTCCGAGGTAGAGCTGGG
TATGGATGCTTAGTGCCCTCACTTCTCTGTCTATACCTGCCCCATCTGAGCACCCATTGCTCACCATCAGATC
AACCTTTGATTTTACATCATAATGTATTACCAATGGAGCTTCACTTTGTTACTAAATTATTAATTTCTTGCCCTC
CAAAATTGTTCTCTCTGAGGCTGAGCATTATAAGAAAATGATCTCTGTTCCCTTTTCATTACTGAAAATCGCCTGG
GGCTTATTTTCAACAACCTTCCACTTATTTTCCATTGGCCCCCAACTCCCTAAGTTAAAAGTATTGTGAACCCC
CGCCCCGCAGTATGCATGGAAGCACAAAGTGACTAGTCGTATGATGTACACAGTCTTCTCCCTGTGATGATTCT
CTGCTCTTTGCTCTTTGTAATTTCTAAATAAAGCAGGTTTTAGAATAA

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FIGURE 3580

CATGGCCAGCACATCCACCACCATCAGGAGCCACAGCAGCAGCCGCCGGGGTTTCAGTGCCAACTCAGCCAGGCT
CCCTGGGGTCAGCCGCTCTGGCTTCAGCAGCGTCTCCGTGTCCCGCTCCAGGGGCAGTGGTGGCCTGGGTGGTGC
ATGTGGAGGAGCTGGCTTTGGCAGCCGCAGTCTGTATGGCCTGGGGGGCTCCAAGAGGATCTCCATTGGAGGGGG
CAGCTGTGCCATCAGTGGCGGCTATGGCAGCAGAGCCGAGGCAGCTATGGCTTTGGTGGCGCCGGGAGTGGATT
TGGTTTCGGTGGTGGAGCCGGCATTGGCTTTGGTCTGGGTGGTGGAGCCGGCCTTGCTGGTGGCTTTGGGGGCC
TGGCTTCCCTGTGTGCCCCCTGGAGGCATCCAAGAGGTACCGTCAACCAGAGTCTCCTGACTCCCTCAACCT
GCAAATCGATCCACCATCCAGCGGTGCGGGCTGAGGAGCGTGAACAGATCAAGACCCTCAACAACAAGTTTGC
CTCCTTCATCGACAAGGTGCGGTTCCTGGAGCAGCAGAACAAGTTCTGGAAACAAGTGGACCCTGCTGCAGGA
GCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTTCGAGCAGTACATCAACAACCTCAGGAGGCAGCT
GGACAGCATTGTGCGGGAAACGGGGCCGCTGGACTCAGAGCTCAGAGGCATGCAGGACCTGGTGGAGGACTTCAA
GAACAAATATGAGGATGAAATCAACAAGCGCACAGCAGCAGAGAATGAATTTGTGACTCTGAAGAAGGATGTGGA
TGCTGCCTACATGAACAAGGTTGAACTGCAAGCCAAGGCAGACACTCTCACAGACGAGATCAACTTCCTGAGAGC
CTTGATGATGCAGAGCTGTCCAGATGCAGACCCACATCTCAGACACATCTGTGGTGTGTCCATGGACAACAA
CCGCAACCTGGACCTGGACAGCATCATCGCTGAGGTCAAGGCCCAATATGAGGAGATTGCTCAGAGAAGCCGGGC
TGAGGCTGAGTCTTGGTACCAGACCAAGTACGAGGAGCTGCAGGTACAGCAGGCAGACATGGGGACGACCTGCG
CAACACCAAGCAGGAGATTGCTGAGATCAACCGCATGATCCAGAGGCTGAGATCTGAGATCGACCACGTCAAGAA
GCAGTGCGCCAACCTGCAGGCCGCCATTGCTGATGCTGAGCAGCGTGGGGAGATGGCCCTCAAGGATGCCAAGAA
CAAGCTGGAAGGGCTGGAGGATGCCCTGCAGAAGGCCAAGCAGGACCTGGCCCGGCTGCTGAAGGAGTACCAGGA
GCTGATGAATGTCAAGCTGGCCCTGGACGTGGAGATCGCCACCTACCGCAAGCTGCTGGAGGGTGAGGAGTGCAG
GCTGAATGGCGAAGGCGTTGGACAAGTCAACATCTCTGTGGTGCAGTCCACCGTCTCCAGTGGCTATGGCGGTGC
CAGTGGTGTGCGCAGTGGCTTAGGCCTGGGTGGAGGAAGCAGTACTCCTATGGCAGTGGTCTTGGCGTTGGAGG
TGGCTTCAGTTCCAGCAGTGGCAGAGCCATTGGGGGTGGCCTCAGCTCTGTTGGAGGCGGCAGTTCACCATCAA
GTACACCACCACCTCCTCCTCCAGCAGGAAGAGCTATAAGCACTAAAGTGCCTCTGCTAGCTCTCGGTCCCACAG
TCCTCAGGCCCTCTCTGGCTGCAGAGCCCTCTCCTCAGGTTGCCTTTCTCTCTCTCTCTATACCATCTGAGCACC
TGTCCAGGTAGAGCTGGGTATGGATGCTTAGTGCCCTCACTTCTTCTCTCTCTCTATACCATCTGAGCACC
ATTGCTCACCATCAGATCAACCTCTGATTTTACATCATGATGTAATCACCCTGGAGCTTCACTGTTACTAAATT
ATTAATTTCTTGCCCTCAGTGTCTATCTCTGAGGCTGAGCATTATAAGAAAATGACCTCTGCTCCTTTTCATTG
CAGAAAATTGCCAGGGGCTTATTTCAGAACAACCTTCACTTACTTTCACTGGCTCTCAAACTCTCTAACTTATA
AGTGTGTGAACCCCCACCCAGGCAGTATCCATGAAAGCACAAGTGACTAGTCCTATGATGTACAAAGCCTGTAT
CTCTGTGATGATTTCTGTGCTCTTCGCTGTTTGCAATTGCTAAATAAA

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FIGURE 3581

TCGACAGCTCTCTCGCCCAGCCCAGTTCTGGAAGGGATAAAAAGGGGGCATCACCGTTCCTGGGTAACAGAGCCA
CCTTCTGCGTCCTGCTGAGCTCTGTTCTCTCCAGCACCTCCCAACCCACTAGTGCCTGGTTCTCTTGCTCCACCA
GGAACAAGCCACCATGTCTCGCAGTCAAGTGTGTCTTCCGGAGCGGGGGCAGTCGTAGCTTCAGCACCGCCTC
TGCCATCACCCGTCTGTCTCCCGCACCAGCTTCACCTCCGTGTCCCGGTCCGGGGGTGGCGGTGGTGGTGGCTT
CGGCAGGGTCAGCCTTGCGGGTGCTTGTGGAGTGGGTGGCTATGGCAGCCGGAGCCTCTACAACCTGGGGGGCTC
CAAGAGGATATCCATCAGCACTAGTGGTGGCAGCTTCAGGAACCGGTTTGGTGCTGGTGCTGGAGGCGGCTATGG
CTTTGGAGGTGGTGCCGGTAGTGGATTGGTTTCGGCGGTGGAGCTGGTGGTGGCTTTGGGGCTCGGTGGCGGAGC
TGGCTTTGGAGGTGGCTTCGGTGGCCCTGGCTTTCTGTCTGCCCTCCTGGAGGTATCCAAGAGGTCACTGTCAA
CCAGAGTCTCCTGACTCCCCCAACCTGCAAATCGACCCAGCATCCAGAGGGTGAGGACCGAGGAGCGCGAGCA
GATCAAGACCCCTCAACAA TAAGTTTGCTCCTTCATCGACAAGGTGCGGTTCTTGAGGCAGCAGAACAAAGTTCT
GGACACCAAGTGGACCCCTGCTGCAGGAGCAGGGCACCAAGACTGTGAGGCAGAACCTGGAGCCGTTGTTTCGAGCA
GTACATCAACAACCTCAGGAGGCAGCTGGACAGCATCGTGGGGGAACGGGGCCGCCTGGACTCAGAGCTGAGAAA
CATGCAGGACCTGGTGAAGACTTCAAGAACAAGTATGAGGATGAAATCAACAAGCGTACCACTGCTGAGAAATGA
GTTTGTGATGCTGAAGAAGGATGTAGATGCTGCCTACATGAACAAGGTGGAGCTGGAGGCCAAGGTTGATGCACT
GATGGATGAGATTAACCTCATGAAGATGTTCTTTGATGCGGAGCTGTCCCAGATGCAGACGCATGTCTCTGACAC
CTCAGTGGTCTCTCCATGGACAACAACCGCAACCTGGACCTGGATAGCATCATCGCTGAGGTCAAGGCCAGTA
TGAGGAGATTGCCAACCGCAGCCGGACAGAAGCCGAGTCCTGGTATCAGACCAAGTATGAGGAGCTGCAGCAGAC
AGCTGGCCGGCATGGCGATGACCTCCGCAACACCAAGCATGAGATCTCTGAGATGAACCGGATGATCCAGAGGCT
GAGAGCCGAGATTGACAATGTCAAGAAACAGTGCGCCAATCTGCAGAACGCCATTGCGGATGCCGAGCAGCGTGG
GGAGCTGGCCCTCAAGGATGCCAGGAACAAGCTGGCCGAGCTGGAGGAGGCCCTGCAGAAGGCCAAGCAGGACAT
GGCCCGGTGCTGCGTGAGTACCAGGAGCTCATGAACACCAAGCTGGCCCTGGACGTGGAGATCGCCACTTACCG
CAAGCTGCTGGAGGGCGAGGAATGCAGACTCAGTGGAGAAGGAGTTGGACCAAGTCAACATCTCTGTTGTCACAAG
CAGTGTCTCTCTGGATATGGCAGTGGCAGTGGCTATGGCGGTGGCCTCGGTGGAGGTCTTGCCGGCGGCCCTCGG
TGGAGGTCTTGCCGGAGGTAGCAGTGGGAAGCTACTACTCCAGCAGCAGTGGGGGTGTGCGCCTAGGTGGTGGGCT
CAGTGTGGGGGGCTCTGGCTTCAGTGCAAGCAGTGGCCGAGGGCTGGGGGTGGGCTTTGGCAGTGGCGGGGGTAG
CAGCTCCAGCGTCAAATTTGTCTCCACCACCTCCTCCTCCCGGAAGAGCTTCAAGAGCTAAGAACCTGCTGCAAG
TCACTGCCTTCCAAGTGCAGCAACCCAGCCCATGGAGATTGCCTCTTCTAGGCAGTTGCTCAAGCCATGTTTTAT
CCTTTTCTGGAGAGTAGTCTAGACCAAGCCAATTGCAGAACCACATTCTTTGGTTCCAGGAGAGCCCCATTCCC
AGCCCCGTGGTCTCCCGTGCCGCAGTTCTATATTCTGCTTCAAAATCAGCCTTCAGGTTTCCACAGCATGGCCCCCT
GCTGACACGAGAACCCAAAGTTTTCCCAAATCTAAATCATAAAACAGAATCCCCACCCCAATCCCAAATTTTGT
TTTGGTTCTAACTACCTCCAGAATGTGTTCAATAAAATGCTTTTATAATAT

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FIGURE 3582

GTGGGCTCAGTGTGGGGGGCTCTGGCTTCAGTGCAAGCAGTGGCCGAAGCTTCAAGAGCTAAGAACCTGCTGCAA
GTCACTGCCTTCCAAGTGCAGCAACCCAGCCCATGGAGATTGCCTCTTCTAGGCAGTTGCTCAAGCCATGTTTTA
TCCTTTTCTGGAGAGTAGTCTAGACCAAGCCAATTGCAGAACACATTCTTTGGTTCCCAGGAGAGCCCCATTCC
CAGCCCCCTGGTCTCCCGTGCCGCAGTTCTATATTCTGCTTCAAATCAGCCTTCAGGTTTCCACAGCATGGCCCC
TGCTGACACGAGAACCCAAAGTTTTCCCAAATCTAAATCATCAAAACAGAATCCCCACCCCAATCCCAAATTTTG
TTTTGGTTCTAACTACCTCCAGAATGTGTTCAATAAAATGCTTTTATAATA

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FIGURE 3583

GTGCGGTTCTGGAGCAGCAGAACAAGGTTCTGGACACCAAGTGGACCCCTGCTGCAGGAGCAGGGCACCAAGACT
GTGAGGCAGAACCTGGAGCCGTTGTTTCGAGCAGTACATCAACAACCTCAGGAGGCAGCTGGACAGCATCGTGGGG
GAACGGGGCCGCCTGGACTCAGAGCTGAGAAACATGCAGGACCTGGTGGAAAGACTTCTAGGCAGTTGCTCAAGCC
ATGTTTTATCCTTTTCTGGAGAGTAGTCTAGACCAAGCCAATTGCAGAACCACATTCTTTGGTTCCCAGGAGAGC
CCCATTTCCAGCCCCCTGGTCTCCCGTGCCGCAGTTCTATATTCTGCTTCAAATCAGCCTTCAGGTTTCCACAGC
ATGGCCCCTGCTGACACGAGAACCCAAAGTTTTCCCAAATCTAAATCATCAAAACAGAATCCCCACCCCAATCCC
AAATTTTGTTTGGTTCTAACTACCTCCAGAATGTGTTCAATAAAATGCTTTTATAAT

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FIGURE 3584

GAAACATGCAGGACCTGGTGGAAAGACTTCAAGAACAAGTATGAGGATGAAATCAACAAGCGTACCACTGCTGAGA
ATGAGTTTGTGATGCTGAAGAAGGATGTAGATGCTGCCTACATGAACAAGGTGGAGCTGGAGGCCAAGGTTGATG
CACTGATGGATGAGATTAACTTCATGAAGATGTTCTTTGATGCGGAGCTGTCCCAGATGCAGACGCATGTCTCTG
ACACCTCAGTGGTCCTCTCCATGGACAACAACCGCAACCTGGACCTGGATAGCATCATCGCTGAGGTCAAGGCC
AGTATGAGGAGATTGCCAACCGCAGCCGGACAGAAGCCGAGTCCTGGTATCAGACCAAGTCCGCAACACCAAGCA
TGAGATCTCTGAGATGAACCGGATGATCCAGAGGCTGAGAGCCGAGATTGACAATGTCAAGAAACAGTGCGCCAA
TCTGCAGAACGCCATTGCGGATGCCGAGCAGCGTGGGGAGCTGGCCCTCAAGGATGCCAGGAACAAGCTGGCCGA
GCTGGAGGAGGCCCTGCAGAAGGCCAAGCAGGACATGGCCCGGCTGCTGCGTGAGTACCAGGAGCTCATGAACAC
CAAGCTGGCCCTGGACGTGGAGATCGCCACTTACCGCAAGCTGCTGGAGGGCGAGGAATGCAGACTCAGTGGAGA
AGGAG

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FIGURE 3585

CCGCGCCTTCAGCTGCATCTCGGCCTGCGGGCCCCGGCCCGCCGCTGCTGCATCACCGCCGCCCTTACCGCGG
CGTCTCCTGCTACCGCGGCCCTCACCGGAGGCTTCGGCAGCCACAGCGTGTGCGGGGGCTTCCGCGCCGGCTCCTG
CGGACGCAGCTTCGGCTACCGCTCCGGGGGGCGTGTGCGGACCCAGCCCCCATGCATCGCCACCGTGTGCGGTCAA
CGAGAGCCTCCTCACGCCCCCTCAACCTGGAGATCGACCCCAACGCACAGTGCCTGAAGCAGGAGGAGAAGGAGCA
GATCAAGTCCCTCAACAGCAGGTTTCGCGGCCCTTCATGGACAAGGTGGGTGTCTGAGAGCAGCAGAACAAGCTGCT
GGAGACAAAGCTGCAGTTCTTCCAGAACCGTGAGTGTGCAAGAGCAACCTGGAGCCTCTGTTTGAGGGCTACAA
CTCTGCGACGGGAGGCCGAGTGCATGGAAGCCAACAGTGGGAGGCTGGCCTCAGAGCTCAACCACGTGCAGGAGG
TGCTGGAGGGTTACAAGAAGAAGTATGAGGAGGAGGTTTCTCTGAGAGCAACAGCTGAGAACGAGTTTGTGGCTT
TGAAGAAGGATGTGGACTGCGCCTACCTCCGCAAGTCAGACCTGGAGGCCAACGTGGAGGCCCTGATCCAGGAGA
TCGACTTCCTGAGGCGGCTGTATGAGGAGGAGATCCTCATTCTCCAGTCGCACATCTCAGACACCTCCGTGGTTG
TCAAGCTGGACAACAGCCGGGACCTGAACATGGACTGCATCATTGCCGAGATTAAGGCACAGTATGACCACATTG
TCACCCGCAGCCGGGCGGAGGCCGAGTCTGGTACCGCAGCAAGTGTGAGGAGATGAAGGCCACGGTGATCAGGC
ACGGGGAGACCTTGCGCCGCACCAAGGAGGAGATCAATGAGCTGAACCGCATGATCCAAAGGCTGACGGCCGAGG
TGGAGAATGCCAAGTGCCAGAACTCCAAGCTGGAGGCCGCGGTGGCCAGTCTGAGCAGCAGGGTGAGGCGGCC
TCAGTGATGCCCGCTGCAAGCTGGCCGAGCTGGAGGGCGCCCTGCAGAAGGCCAAGCAGGACATGGCCTGCCTGA
TCAGGGAGTACCAGGAGGTGATGAACTCCAAGCTGGGCCTGGACATCGAGATCGCCACCTACAGGCGCCTGCTGG
AGGGCGAGGAGCAGAGGCTATGTGAAGGCATTGGGGCTGTGAATGTCTGTGTGTCAGCAGCTCCCGGGGCGGGGTCG
TGTGCGGGGACCTCTGCGTGTGTCAGGCTCCCGGCCAGTGACTGGCAGTGTCTGCAGCGCTCCGCTGCAACGGGAAC
GTGGCGGTGAGCACCGGCTGTGTGCGCCCTGCGGCCAATTGAACACCACCTGCGGAGGGGGTTCTTGCGGCGTG
GGCTCCTGTGGTATCAGCTCCCTGGGTGTGGGGTCTTGCGGCAGCAGCTGCCGGAATGTTAGGCACCCCAACTC
AAGTCCCAGGCCCCAGGCGTCTTTCCTGCCCTGCCTTGCTTGGCCCATCCAGTCCAGGCGCCTGGAGCAAGTGCT
CAGCTACTTCTCCTCCACTTTGAAAGACCCCTCCCACTCCTGGCCTCACATTTCTCTGTGTGATCCCCCACTTC
TGGGCTCTGCCACCCACAGTGGGAAAGGCACCCTAGAAAGAAGTCCGTGGCACCATAGGAAGGGGCTCAGGAGC
AGGAAGGGCCAGGACCAGAACCTTGCCACGGCAACTGCCTTCTGCCTCTCCCTTCTCCTCTGCTCTTGATC
TGTGTTTCAATAAATTAATGTAGCC

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FIGURE 3586

GCGAGTGCGCGCTCCTCCTCGCCCGCGCTAGGTCCATCCCGGCCAGCCACCATGTCCATCCACTTCAGCTCCC
CGGTATTACCTCGCGCTCAGCCGCCTTCTCGGGCCCGCGCGCCAGGTGCGCCTGAGCTCCGCTCGCCCCGGCG
GCCTTGGCAGCAGCAGCCTCTACGGCCTCGGCGCCTCACGGCCGCGCGTGGCCGTGCGCTCTGCCTATGGGGGCC
CGGTGGGCGCCGGCATCCGCGAGGTCAACATTAACCAGAGCCTGCTGGCCCCGCTGCGGGCTGGACGCCGACCCCT
CCCTCCAGCGGGTGCGCCAGGAGGAGAGCGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATCGACA
AGGTGCGGTTTCTGGAGCAGCAGAACAAGCTGCTGGAGACCAAGTGGACGCTGCTGCAGGAGCAGAAGTCGGCCA
AGAGCAGCCGCCTCCAGACATCTTTGAGGCCAGATTGCTGGCCTTCGGGGTCAGCTTGAGGCACTGCAGGTGG
ATGGGGGCCGCTGGAGGCGGAGCTGCGGAGCATGCAGGATGTGGTGGAGGACTTCAAGAATAAGTACGAAGATG
AAATTAACCACCGCACAGCTGCTGAGAATGAGTTTGTGGTGCTGAAGAAGGATGTGGATGCTGCCTACATGAGCA
AGGTGGAGCTGGAGGCCAAGGTGGATGCCCTGAATGATGAGATCAACTTCCTCAGGACCCTCAATGAGACGGAGT
TGACAGAGCTGCAGTCCAGATCTCCGACACATCTGTGGTGCTGTCCATGGACAACAGTCGCTCCCTGGACCTGG
ACGGCATCATCGCTGAGGTCAAGGCGCAGTATGAGGAGATGGCCAAATGCAGCCGGGCTGAGGCTGAAGCCTGGT
ACCAGACCAAGTTTGAGACCCTCCAGGCCAGGCTGGGAAGCATGGGGACGACCTCCGGAATACCCGGAATGAGA
TTTCAGAGATGAACCGGGCCATCCAGAGGCTGCAGGCTGAGATCGACAACATCAAGAACCAGCGTGCCAAGTTGG
AGGCCGCCATTGCCGAGGCTGAGGAGCGTGGGGAGCTGGCGCTCAAGGATGCTCGTGCCAAGCAGGAGGAGCTGG
AAGCCGCCCTGCAGCGGGGCAAGCAGGATATGGCACGGCAGCTGCGTGAGTACCAGGAACATGAGCGTGAAGC
TGGCCCTGGACATCGAGATCGCCACCTACCGCAAGCTGCTGGAGGGCGAGGAGAGCCGGTTGGCTGGAGATGGAG
TGGGAGCCGTGAATATCTCTGTGATGAATTCCACTGGTGGCAGTAGCAGTGGCGGTGGCATTGGGCTGACCCTCG
GGGAACCATGGGCAGCAATGCCCTGAGCTTCTCCAGCAGTGCGGGTCTGGGCTCCTGAAGGCTTATTCCATCC
GGACCGCATCCGCCAGTCGCAGGAGTGCCCGCGACTTGA

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FIGURE 3587

MSIHFSSPVFTSRSAAFSGRGAQVRLSSARPGLGSSSLYGLGASRPRVAVRSAYGGPVGAGIREVTINQSLLAP
LRLDADPSLQVRVQEESQIKTLNKNFASFIDKVRFLQQNKLLTKWTLLQEQSAKSSRLPDIFEAQIAGLRG
QLEALQVDGGRLEAELRSMQDVVEDFKNKYEDEINHRTAENEFVVLKKDVDAAYMSKVELEAKVDALNDEINFL
RTLNETELTELQSQISDTSVVLSDNSRSLDLGIIAEVKAQYEEMAKCSRAEAEAWYQTKFETLQAQAGKHGDD
LRNTRNEISEMNRAIQRLQAEIDNIKNQRAKLEAAIAEAEERGELALKDARAKQEELEAALQRGKQDMARQLREY
QELMSVKLALDIEIATYRKLEGEESRLAGDVGAVNISVMNSTGGSSSGGGIGLTLGGTMGSNALSFSSSAGPG
LLKAYSIRTASASRRSARD

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FIGURE 3588

TTCCGGTCCCGGCTCAGCCTCCGACCCAGGTGGTCTGGAGCCTGCCGGGAGAGTGGTGCCATCTGAGAGGCTGGT
CGTGGACTGTGGTTGGGGGAGGTGGGAGCTGTTTTAACCGTGTGCCCCCTCTCCTGTGCCGGCGTGGGCATCCCC
CGGGGCAGTGGAACGCGGGCGCTCCTCCAGCTTCCGAGTCCAGCCAGCCTGGGCGCGGGGCGCCGCCCCGAGAC
ACCCGAGGAGTCCGTTCCCTCCCTGGTTACGTGGACTGTGGAGCTGGTCTCTTGTGGCTCAGCGCCGTGCGGAGGT
TGAAGCGTACCTGCGGAGGTGCGACCAGGGCGTGAGGAGGAGGAGGAAGGGCATGAGCCGAGCTTGAGGAATCCG
TGCTCCAAACTCTACACTCAAGGGTGGCCCTTGGGTAGGGTGAAGATCCCCTGTCTTTATCCTAGTTCCACACCT
TGGTGTGGGTTACTGGGTGCAGGATGAAGTGTGCGCTCGGAGGTGCTGGAGGTGTCGGTGGAGGGGCGGCAGGTGG
AGGAGGCCATGCTGGCTGTGCTGCACACGGTGCTTCTGCACCGCAGCACAGGCAAGTTCCACTACAAGAAGGAGG
GCACCTACTCCACTGGCACCCTGGGCACCCAGGATGTTGACTGTGACTTCATCGACTTCACCTATGTGCGTGTCT
CTTCTGAGGAACCTGGATCGTGCCCTGCGCAAGGTTGTTGGGGAGTTCAAGGATGCACTGCGCAACTCTGGTGGCG
ATGGGCTGGGGCAGATGTCCTTGGAGTTCTACCAGAAGAAGAAGTCTCGCTGGCCATTCTCAGACGAGTGCAATCC
CATGGGAAGTGTGGACGGTCAAGGTGCATGTGGTAGCCCTGGCCACGGAGCAGGAGCGGCAGATCTGCCGGGAGA
AGGTGGGTGAGAACTCTGCGAGAAGATCATCAACATCGTGGAGGTGATGAATCGGCATGAGTACTTGCCCAAGA
TGCCACACAGTCGGAGGTGGATAACGTGTTTGACACAGGCTTGCGGGACGTGCAGCCCTACCTGTACAAGATCT
CCTTCCAGATCACTGATGCCCTGGGCACCTCAGTCACCACCACCATGCGCAGGCTCATCAAAGACACCCCTTGCCC
TCTGAGCGTCTGCTGGATCTCTGGGAGCTCCTTGATGGCTCCAGACCTTGGCTTTTGGGAATTGCACCTTTGGGC
CTTTGGGCTCTGGAACCTGCTCTGGGTCAATTGGTGAGACTTGGAAGGGGAGCCCCCGCTGGCTTCTTGGTTTTG
TGGTTGCCAGCCTCAGGTATCCTTTTAATCTTTGCTGACGGTTCAGTCCTGCCTCTACTGTCTCTCCATAGCCC
TGGTGGGGTCCCCCTTCTTTCTCCACTGTACAGAAGAGCCACCACTGGGATGGGGAATAAAGTTGAGAACATG

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FIGURE 3589

MNCRSEVLEVSVEGRQVEEAMLAVLHTVLLHRSTGKFHYKKEGTYSTGTVGTQDVDCDFIDFTYVRVSSEELDRA
LRKVVGEFKDALRNSGGDGLGQMSLEFYQKKKSRWPFSDCIPWEVWTVKVHVVALATEQERQICREKVGEKLCE
KIINIVEVMNRHEYLPKMPTQSEVDNVFDTGLRDVQPYLYKISFQITDALGTSVTTTMRRLIKDTLAL

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FIGURE 3590

ATGAGCAGACAAGCCAGCAAGACATCTGGTGGCGGGAGCCAGGGTTTCTCCGGCCGCTCTGCTGTGGTCTCCGGC
AGCAGCAGGATGAGCTGTGTGGCCACTCTGGGGGAGCTGGCGGAGGGGCTATGGCTTCCGGAGCGGAGCAGGT
GGCTTTGGCAGTCGCAGCCTCTACAACCTGGGCGGCAACAAGAGCATCTCCATCAGCGTGGCAGCTGGCGGGCTCC
CGGGCTGGAGGCTTTGGGGGAGGGCGGAGCAGCTGTGCCTTTCAGGTGGCTATGGAGGTGGCTTTGGGAGCGGC
TATGGAGGTGGCTTTGGTGGTGGCTTTGGTGGTGGCAGAGGAATGGGAGGTGGCTTTGGTGGAGCTGGTGGCTTT
GGAGGGGCTGGTGGCTTTGGAGGGGCTGGTGGCTTTGGTGGTCCGTGGCTTTGGTGGGTCTGGTGGCTTTGGT
GGGCTGGCAGCTTGGGCAGTCTGGTGGCTTTGGCCCTGGGGGCTTTCCTGGGGGAATTCAGGAAGTGACTATC
AACCAGAGTCTCCTGCAGCCCTCAATGTGGAGATCGACCGCCAGATTGGGCAAGTAAAGGCCCAGGAGCGGAAA
CAGATCAAGACCCTCAACAACAAGTTTGCCCTCCTTATTGACAAGGTGCGGTTCCTGGAGCAACAGAACAAAGTC
CTGGAGACCAAGTGAACCTGCTCCAGCAGCAGGGCACAAGTTCCATCTCAGGCACAAACAACCTTGAGCCTCTT
TTTGAGAATCACATCAACTACCTGCGGAGCTACCTGGACAACATCCTCGGGGAGAGAGGGCGCCTGGACTCTGAG
CTGAAGAACATGGAGGACCTGGTGAAGACTTCAAGAAGAAATATGAGGATGAAATCAATAAACGTACAGCTGCT
GAGAATGAATTTGTGACTCTGAAGAAGGATGTGGACAGTGCCTATATGAACAAGGTGGAGCTTCAGGCCAAAGTG
GATGCCTTGATAGATGAGATCGACTTCTTAAGGACCTCTACGACGCTGAGCTATCTCAGATGCAGAGCCACATC
AGTGACACATCTGTGGTGTGTCCATGGACAATAATCGCTCCCTGGACCTGGACAGCATCATTGCTGAAGTTTCGT
GCACAGTATGAGGATATCGCTCAGAGAAGCAAGGCCGAAGCTGAGGCCCTGTACCAGACCAAGTTGGGGGAGCTG
CAGACCACGGCTGGCAGGCATGGGGATGACCTAAGAAATACCAAGAGCGAGATCATAGAGCTCAACAGAATGATC
CAGAGGCTGCGGGCAGAGATCGAGGTGTCAAGAAGCAGAATGCCAACCTGCAGACGGCCATTGCCGAGGCCGAG
CAGCATGGAGAGATGGCCCTCAAGGATGCCAATGCCAAGCTCCAAGAGCTGCAGGCTGCTCTACAGCAGGCGAAG
GATGACCTGGCGCGGCTGCTACGTGACTACCAGGAGCTGATGAATGTCAAGCTGGCCCTGGACGTGAGATCCCC
CCTACCGCAGCTGCTGGAGGGCGAGGAGTACAGCAGGATGTCTGGAGAGTGTCCGAGTGTGTGAGCATCTCCGT
GGTCAGCAGCAGCAGACTTCCGCCTCCGAGGTGGCTATGGAGGAGGTTACGGCGGAGGCATGGGCGGTGGTTT
AGGAGGTGGCTTCAGTGCGGGCGGCGGCTCAGGCAGTGGCTTTGGCCGGGGAGGCGGCGGTGGAATCGGCGGTGG
ATTTGGCGGGCGGCAGCAGCGGTTTCAGCGGTGGCAGCGGCTTTGGCTCCATCTCTGGCGCCCGCTATGGAGTCAG
TGGCGGGGGCTTCAGCTCGGCCAGCAACCGGGGCGGCAGCATCAAGTTCTCCAGTCCTCCAGTCCTCCAGCG
CTACTCCAGATAAAGAGCACGCATCAGCATCGCAGCCACTCCAGCGCCTCCCTCCGCTCCCCACGCCCCCATAT
TGGCAACACCCCCAGCGCCACCCCATGCTCCCCAAGAACGCGGCTCTGCGCTGGAAGGCTTGTGGCCTCTTGCTC
CTCCTTCCAGATCCCCGGCCAAAGCCAGTCACGAGAATTTAGGCTCTTCTCTCCGGCTCCAGCCTGTGCCTGTG
ATTGTCCAGGTGTGGCCTAGGCCGCCACCTTCTGCTGCCCCGGAGTCCCCTCCCTGGGTGGGATGCTCACTACAG
CTCTGATGTATATAGCACACAGCCCCCTCCGCCCCCTCCGGTCTGTGCGCAATAAA

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FIGURE 3591

CTGCTCCTTCTAGGATCTCCGCTGGTTTCGGCCCCGCTGCCTCCACTCCTGCCTCCACCATGTCCATCAGGGTGA
CCCAGAAGTCCTACAAGGTGTCCACCTCTGGCCCCCGGGCCTTCAGCAGCCGCTCCTACACGAGTGGGCCCCGTT
CCCGCATCAGCTCCTCGAGCTTCTCCCGAGTGGGCAGCAGCAACTTTCGCGGTGGCCTGGGCGGCGGGCTATGGTG
GGGCCAGCGGCATGGGAGGCATCACCGCAGTTACGGTCAACCAGAGCCTGCTGAGCCCCCTTGTCCTGGAGGTGG
ACCCCAACATCCAGGCCGTGCGCACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCA
TAGACAAGGTACGGTTTCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGA
CGGCTCGAAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCC
AGGAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGGGGCTGGTGGAGGACTTCAAGAACAAGTATGAGG
ATGAGATCAATAAGCGTACAGAGATGGAGAACGAATTTGTCCTCATCAAGAAGGATGTGGATGAAGCTTACATGA
ACAAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACCGACGAGATCAACTTCCTCAGGCAGCTATATGAAGAGG
AGATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCTGTGGTGCTGTCCATGGACAACAGCCGCTCCCTGGACA
TGGACAGCATCATTGCTGAGGTCAAGGCACAGTACGAGGATATTGCCAACCGCAGCCGGGCTGAGGCTGAGAGCA
TGTACCAGATCAAGTATGAGGAGCTGCAGAGCCTGGCTGGGAAGCACGGGGATGACCTGCGGCGCACAAAGACTG
AGATCTCTGAGATGAACCGGAACATCAGCCGGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCC
TGGAGGCCGCCATTGCAGATGCCGAGCAGCGTGGAGAGCTGGCCATTAAAGGATGCCAACGCCAAGTTGTCCGAGC
TGGAGGCCGCCCTGCAGCGGGCCAAGCAGGACATGGCGCGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCA
AGCTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGCTGGAGGGCGAGGAGAGCCGGCTGGAGTCTGGGA
TGCAGAACATGAGTATTATACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCA
CAAGCCCCGGCCTCAGCTACAGCCTGGGCTCCAGCTTTGGCTCTGGCGCGGGCTCCAGCTCCTTCAGCCGCACCA
GCTCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACACGTGATGGGAAGCTGGTGTCTGAGTCCTCTGACGTCC
TGCCCAAGTGAACAGCTGCGGCAGCCCCCTCCAGCCTACCCCTCCTGCGCTGCCCCAGAGCCTGGGAAGGAGGCC
GCTATGCAGGGTAGCACTGGGAACAGGAGACCCACCTGAGGCTCAGCCCTAGCCCTCAGCCCACCTGGGGAGTTT
ACTACCTGGGGACCCCCCTTGCCCATGCCTCCAGCTACAAAACAATTCAATTGCTTTTTTTTTTTGGTCCAAAT
AAAACCTCAGCTAGCTCTGCCAAACCC

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FIGURE 3592

MSIRVTQKSYKVSTSGPRAFSSRSYTSGPSRISSSSFSSRVGSSNFRGGLGGGYGGASGMGGITAVTVNQSLSP
LVLEVDPNIQAVRTQEKEQIKTLNNKFASFIDKVRFLEQQNKMLETKWSLLQQQKTARSNMDNMFESYINNLRQ
LETLGQEKLEAELGNMQGLVEDFKNKYEDEINKRTEMENEFVLIKKDVDEAYMNKVELESRLGLTDEINFLR
QLYEEEIRELQSQISDTSVVLSDNSRSLDMSIIAEVKAQYEDIANRSRAEAESMYQIKYEELQSLAGKHGDDL
RRKTEISEMNRNISRLQAEIEGLKGQRASLEAAIADAEQRGELAIKDANAKLSELEAALQRAKQDMARQLREYQ
ELMNVKLALDIEIATYRKLEGEESRLESGMQNMSIHTKTTSGYAGGLSSAYGGILTSPGLSYSLSGSSFGSGAGSS
SFSRTSSSRVAVVKIETRDGKLVSESSDVLPK

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FIGURE 3593

CGGGGTCGTCCGCAAAGCCTGAGTCCTGTCTTTCTCTCTCCCGGACAGCATGAGCTTCACCACTCGCTCCACC
TTCTCCACCAACTACCGGTCCCTGGGCTCTGTCCAGGCGCCCAGCTACGGCGCCCGGCCGGTCAGCAGCGCGGCC
AGCGTCTATGCAGGCGCTGGGGGCTCTGGTTCCCGGATCTCCGTGTCCCGCTCCACCAGCTTCAGGGGCGGCATG
GGGTCCGGGGGCTGGCCACCGGGATAGCCGGGGTCTGGCAGGAATGGGAGGCATCCAGAACGAGAAGGAGACC
ATGCAAAGCCTGAACGACCGCCTGGCCTCTTACCTGGACAGAGTGAGGAGCCTGGAGACCGAGAACCGGAGGCTG
GAGAGCAAAATCCGGGAGCACTTGGAGAAGAAGGGACCCCAGGTCAGAGACTGGAGCCATTACTTCAAGATCATC
GAGGACCTGAGGGCTCAGATCTTCGCAAATACTGTGGACAATGCCCGCATCGTTCTGCAGATTGACAATGCCCGT
CTTGCTGCTGATGACTTTAGAGTCAAGTATGAGACAGAGCTGGCCATGCGCCAGTCTGTGGAGAACGACATCCAT
GGGCTCCGCAAGGTCATTGATGACACCAATATCACACGACTGCAGCTGGAGACAGAGATCGAGGCTCTCAAGGAG
GAGCTGCTCTTCATGAAGAAGAACCACGAAGAGGAAGTAAAAGGCCTACAAGCCCAGATTGCCAGCTCTGGGTTG
ACCGTGGAGGTAGATGCCCCCAAATCTCAGGACCTCGCCAAGATCATGGCAGACATCCGGGGCCCAATATGACGAG
CTGGCTCGGAAGAACCGAGAGGAGCTAGACAAGTACTGGTCTCAGCAGATTGAGGAGAGCACACAGTGGTCACC
ACACAGTCTGCTGAGGTTGGAGCTGCTGAGACGACGCTCACAGAGCTGAGACGTACAGTCCAGTCCCTTGGAGATC
GACCTGGACTCCATGAGAAATCTGAAGGCCAGCTTGGAGAACAGCCTGAGGGAGGTGGAGGGCCCGCTACGCCCTA
CAGATGGAGCAGCTCAACGGGATCCTGCTGCACCTTGAGTCAGAGCTGGCACAGACCCGGGCAGAGGGACAGCGC
CAGGCCCAGGAGTATGAGGCCCTGCTGAACATCAAGGTCAAGCTGGAGGCTGAGATCGCCACCTACCGCCGCCTG
CTGGAAGATGGCGAGGACTTTAATCTTGGTGATGCCTTGGACAGCAGCAACTCCATGCAAACCATCCAAAAGACC
ACCACCCGCCGGATAGTGGATGGCAAAGTGGTGTCTGAGACCAATGACACCAAAGTTCTGAGGCATTAAGCCAGC
AGAAGCAGGGTACCCTTTGGGGAGCAGGAGGCCAATAAAAAGTTCAGAGTTCATTGGATGTC

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FIGURE 3594

MSFTTRSTFSTNYRSLGSVQAPSYGARPVSSAASVYAGAGGSGSRISVSRSTSFRGGMGSGGLATGIAGGLAGMG
GIQNEKETMQSLNDRLASYLDRVRSLETENRRLESKIREHLEKKGPQVRDWSHYFKI IEDLRAQIFANTVDNARI
VLQIDNARLAADDFRVKYETELAMRQSVENDIHGLRKVIDDTNITRLQLETEIEALKEELLFMKKNHHEEEVKGLQ
AQIASSGLTVEVDAPKSQDLAKIMADIRAQYDELARKNREELDKYWSQQIEESTTVVTTQSAEVGAAETTLTEL
RTVQSLEIDLDSMRNLKASLENSLREVEARYALQMEQLNGILLHLESELAQTRAEGQRQAQEYEALLNIKVKLEA
EIATYRRLLLEDGEDFNLGDALDSSNSMQTIQKTTTTRRIVDGKVVSETNDTKVLRH

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FIGURE 3595

AGATAAGAGCTGGACGGAGGCTAAAGCGGCAGCCCCAGCTTCGCGCCCCGCCAGTCCCTTTCCCCTGCTGGGGA
TCCCCCTCTTCCCCGCCACCCCTTACCCGCATGCAGCCCAGCGCCCTATGCTAGCCCTCCCCCTCCCCCTG
CTGGAGCGGGCGCCGCCGGGGGAGGAGGGGGAATCGGCTGCGGGTCTTGGTGTTCAGCACCCAGTTTCCCT
TCAAGCCGGGTGCGATGTACGACTGTATGGAACGTTTGCCCCGGGTCCGCGACGGCTGTACGGGGCGCCGGG
CCCCGGGCCGGCTTGCTGCGCAGAGCCACCGCGGCTCCTGTTTCGCCGGACTTGAATCTTTTGCCTGGCCGCA
CCCCCAGCCTGCAATCGGTGGAGACACAGAGCACCAGCTCAGAGGAGATGGTGCCAGCTCGCCCTCGCCCCCT
CCGCTCCTCGGGTCTACAAGCCATGCTTCGTGTGCAATGACAAGTCTCTGGCTACCACTATGGGGTCAGCTCT
TGTGAAGGCTGCAAGGGCTTCTTTGCGCGAAGCATCCAGAAGAATGTTGTACACGTGTACCGCGACAAAAAC
TGTATCATCAACAAGGTGACCAGGAATCGCTGCCAGTACTGCCGGCTACAGAAGTGCTTCGAAGTGGGCATGTCC
AAGGAAGCTGTGCGAAATGACCGGAACAAGAAGAAGAGAGGTGAAGGAAGAAGGGTCACCTGACAGCTATGAG
CTGAGCCCTCAGTTAGAAGAGCTCATCACCAAGGTCAGCAAAGCCCATCAGGAGACTTTCCCTCGCTCTGCCAG
CTGGGCAAGTATACCACGAACCTCAGTGCAGACCACCGCGTGCAGCTGGATCTGGGGCTGTGGGACAAGTTCAGT
GAGCTGGCTACCAAGTGCATCATCAAGATCGTGGAGTTTGCCAAGCGTTGCCTGGCTTTACAGGGCTCAGCATT
GCTGACCAGATCACTCTGCTCAAAGCTGCCTGCCTAGATATCCTGATGCTGCGTATCTGCACAAGGTACACCCCA
GAGCAGGACACCATGACCTTCTCCGACGGGCTGACCCTGAACCGGACCCAGATGCACAATGCCGGCTTCGGGCC
CTCACAGACCTTGCTTTTGCTTTGCTGGGCAGCTCCTGCCCTGGAGATGGATGACACCGAGACAGGGCTGCTC
AGCGCCATCTGCCTCATCTGCGGAGACCGCATGGACCTGGAGGAGCCCGAAAAAGTGGACAAGCTGCAGGAGCCA
CTGCTGGAAGCCCTGAGGCTGTACGCCCCGGCGCCGGCGGCCAGCCAGCCCTACATGTTCCCAAGGATGCTAATG
AAAATCACCGACCTCCGGGGCATCAGCACTAAGGGAGCTGAAAGGGCCATTACTCTGAAGATGGAGATTCCAGGC
CCGATGCCTCCCTTAATCCGAGAGATGCTGGAGAACCCTGAAATGTTTGAGGATGACTCCTCGCAGCCTGGTCCC
CACCCCAATGCCTCTAGCGAGGATGAGGTTTCTGGGGGCCAGGGCAAAGGGGGCCTGAAGTCCCCAGCCTGACCA
GGGCCCCTGACCTCCCCGCTGTGGGGGTGGGGCTTCAGGCAGCAGACTGACCATCTCCAGACCGCCAGTGACT
GGGGGAGGACCTGCTCTGCCCTCTCCCCACCCCTTCCAATGAGCTCCTTGTTTTTGCCAAAGTTTCTAGGGGTGC
CTCTGTGTTTATCCCTTCTGATCTAACC GGCTCCCTCGCCAGTCCCGGGGGCCTGCCCTGCTCCCACAGGAG
AGAGGGCAAAGGGATGAGCCTGGGTTTGGACTCTAAAATCTCAGCACTGCCCCATGGGTCTTAGACTTCCCAGGG
CAAGAGGAAGACCTGCCATTCCACAGCCCCCTTCTCTGCCAGGTGCTTGGCTCTCTGAGAGCAAACAGGAACAC
TAGAGACCAAAAAGGGGACAAAGGAGAAGGGCTGAGCCACCTTCTTGCTCCTACCCTTGGTGCCTAATGCTGTG
TGATGCACCTGCAGGGTGTGTGCTAGCCTCTGTGCCCCGTCCTTGTGCCAGGTCAAGGTGGGGGAGGCTGGGCC
CTGCATTTCTGGGGCAGGAACAGAGGGTGAAAGGGACAGATAGATGCAGGTCCATTCTGCACCTCTTGGCTCGGG
TGCAGAGTTACCCCTGTGCCCTCCGTTATAAGTCCCTCCCCAGCCCTGTCATGTGCCTTGGGCTCCTCCTGCC
TCCATCTCAGCCATTGGGGCAGGGACCCCTCCTACACTACAGAGGGGCCAGGGGATCCCTCTCTCCCTAGTGCCTT
CCACCCCTTACTCCCCAGAGCAGCTTGGCCCAGGGAGGGGGGATGCTGCTTAGCTGATCCCGCCCTGACCCAGAG
GAAGCCTCTATTTATTTATTTAGCTTTTGTTTACACCGTGAATTGACCCCTTCTCCAGGGGTCTTGGGTGGGG
AGCCCAGGGCCCCCTGTGACCCCTCCTTTCTTCTCCAATCCCCAGTTTGTATTTAGCTGCCAAATAAGATTCCCA
TTGGCTCCCTGTGTTCTTGGGGGGTCAGGGTGTGTCCCTCCCTCTGTTTACATCTCCCTCTACCCCGCT
GTATCGCATATTGCTGAGTTTTCTATTTTTGCAAATAAAGTGTATGGAACTC

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FIGURE 3596

AGTTTCTAAGGATCATGTCTGCGAGCCAGGATTCTGTATCCAGAGACAACGGCCCCAATGGGATGGAGCCCCAAAG
GTGTCATTGAGAGTAACTGGAATGAGATTGTTGACAGCTTTGATGACATGAACCTCTCAGAGTCCCTTCTCCGTG
GCATCTACGCCATATGGTTTAGAGAAGCCGTCTGCCATCCAGCAGCGAGCCATTCTACCTTGATCAAGGGTTATC
ACGTGATTGCTCAAGCCCAATCTGGGGCTGGGAAAATGGCCACATTTGCCATATTGATTCTGCAGCAGATTGAAT
TAGATCTAAAAGCCACCCAGGCCCTTGCTCCTAGCACCCACTCAAGAATTGGCTCAGCAGATACAGAAGGTGGTCA
TGGCACTAGGAGACTACATGGGTGCCCTCCTGTATGCCTGTATCAGGGGACCAACATGCGTGCTGAGGTGCAGA
AACTGCAGACGAAGCTCCTCACATCATTGTGGGTACCCCTGGCCATGTGTTTGATATGCTTAACGGGAGATACCT
GTCTCCCAAATACATCAAGATGTTTGTACTGGACGAAGCTGACGAAATGTTAAGCCGTGGATTCAAGGACCAGAT
CTATGACATATTCCAAAAGCTCAACAGCAACACCCAGGTAGTTTTGCTGTGCTGAGCTGCGATGCCCTTCTGATGTGCT
TGAGGTGACCAAGAAGTTCATGAGGGACCTCATTCGGATTCTTGTACGAAGGAAGTGTTGACCTTGGAGGGTAT
CCGCCAATTCTACATCAATTTGGAACGAGAGGAGTGGAAGCTGGACACACTATGTGACTTGTATGAAACCCTGAC
CATCACCCAGGCAGTCATCTCATCAACACCCGGAGGAAGGTGGACTGGCTCACCAGAGAAGATGCATGCTCGAG
ATTTCACTGTCTTCACCATTCGTGGAGATATGGACCAAAACGAACAAGACGTGATCTTGAGGGAGTTTCGTTATG
GCTCTAGCAGTTTTGATTACCACTGACCTGCTGGCCAGAGGCATTGATGTGCAACAGGTTTTCTTTAGTCACCAAC
TATGACCTTCCCACCAACAGGGAAAACCATATCCATAGAATCGGTTCGAGGTGGACGGTTTGGCCGTAAAGGTGTG
GCTATTAACGTGGTGACAGAAGAAGACAAGAGGACTCTTCGAGACATCGAGATCTTCTACAACCTCCTCCATTGAG
GAAATGCCCCCTCAATGTTGCTGACCTCATCTGAGGGGCTGTCTGCCACCCAGCCCCAGCCAGGGCTCTATCTCG
GGGGGCTGAGGAGCAGCAGGAGTGGGGAGGGAAGGGAGCCAAGGGATGGACATCTTGTCATTTTTTTCTTTGAAT
AAATGTCACTTTTTTGAGGCAAAA

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FIGURE 3597

MEPKGVIESNWNEIVDSFDDMNLSESLLRGIYAYGLEKPSAIQQRAILPCIKGYHVIAQAQSGAGKMATFAILIL
QQIELDLKATQALLLAPTQELAQQIQKVMALGDYMGASCHACIRGTNMRAEVQKLQTKLLTSLWVPLAMCLICL
TGDTCCLPFGFLSRRKC

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FIGURE 3598

GGAGGACTGGGTGCGCGTGCAGGGATCGGAAGCCGGTTGGAGTGTGTGAGGTTTTCTCGCTCTAGGGAGATTCTT
CAAGCAATCACTATGTCAACAGACACAGGTGTTTCCCTTCCTTCATATGAGGAAGATCAGGGATCAAAACTTATT
GGAAAAGCTAAAGAGGCACCATTTGTACCCGTTGGAATAGCAGGTTTTGCAGCAATTGTTGCATATGGATTATAC
AAACTGAAGAGCAGGGGAAATACTAAAATGTCCATTCATCTGATCCACATGCGTGTGGCAGCCCAAGGCTTTGTT
GTAGGAGCAATGACTGTTGGTATGGGCTACTTCATGTATCGGGAATTCTGGGCAAACCTAAGCCTTAGAAGAAG
AGATGCTGTCTTGGTCTTGTGGACGAGCTTGCTTTAGTTAGACGTCTCATTATTGAAGTTACTATTATTGTTGG
AAATAAACTAATTTGTATGGGTTTAGATGGTAACATGGCATTGTAATATTGGCTTCCTTTCTTGCAGGCTTGAT
TTGCCTGGTGACCAAATTACTAGTGACTAGTTTACTAACTAGGTCATTAAAGGAAGTCAAGTTAACTTAAACACG
TCAACTAAACGCACCTTGATGGTGTGAAATGTCCACCTTCTTAAATTTTTAAGATGAACTGAGTTCTAAAGAAGA
TAACAGGCCAATCCTGAAGGTACTCCAGTTTGCTGCAGAATCTCACATATTTTGGATGTTGTATAAGAGTCCTA
TTTGCCCCAGTTAATTCAACTTTTGTCTGCCTGTTCTGTGGACTGGCTGGCTCTGTTAGAACTCTGTCCAAAAAG
TGCATGGAATATAACTTGTAAAGCTTCCCACAATTGACAATATATGTGCATGTGTTTAAGCCAAATCCAGAAAGC
TTAAACAATAGAGCTGCATAATAGTATTTATTAAAGAATCACAACGTAAACATGAGAATAACTTAAGGATTCTA
GTTTAGTTTTTTGTAATTGCAAATTATATTTTGCTGCTGATATATTAGAATAATTTTTAAATGTCATCTTGAAA
TAGAAATATGTATTTTAAGCACTCATGCAAAGGTAAATGAACACTTTTTAAATGTGTGTTGCTTATTTTTTCCAT
AAGAATTGTAAACATTGAACTGAACAAATTACCTATAATGGATTTGATTAATGACTAATGAGCAAGCGGGTTTGG
CCAGACAGTATACCCAACTTTTATATAGTATACAGAAGGCTATCACACTTGTGAAATTCCTTGTCTAATCCGA
ATTTGCATTCCATGGTGATAACATGGTATATGTATTGTTATTAAAGTAAGTGACCCATGTC

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FIGURE 3599

GGAGGACTGGGTGCGCGTGCAGGGATCGGAAGCCGGTTGGAGTGTGTGAGGTTTTCTCGCTCTAGGGAGATTCTT
CAAGCAATCACTATGTCAACAGACACAGGTGTTTCCCTTCCTTCATATGAGGAAGATCAGGGATCAAAACTTATT
GGAAAAGCTAAAGAGGCACCATTTGTACCCGTTGGAATAGCAGGTTTTGCAGCAATTGTTGCATATGGATTATAC
AAACTGAAGAGCAGGGGAAATACTAAAATGTCCATTCATCTGATCCACATGCGTGTGGCAGCCCAAGGCTTTGTT
GTAGGAGCAATGACTGTTGGTATGGGCTACTTCATGTATCGGGAATTCTGGGCCTTTAGTTAGACGTCTCATTAT
TGAAGTTACTATTATTGTTGGAAATAAACTAATTTGTATGGGTTTAGATGGTAACATGGCATTTTGAATATTGGC
TTCCTTTCTTGCAGGCTTGATTTGCCTGGTGACCAAATTACTAGTGACTAGTTTACTAAGTGGTCATTAAAGGA
AGTCAAGTTAACTTAAACACGTCAACTAAACGCACTTGATGGTGTGAAATGTCCACCTTCTTAAATTT

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FIGURE 3600

GCAGCTGCGCTGCGACTGCTCTGGAAGGAGAGGACGGGGCACAAACCCTGACCATGACCCCCACAGGCTGCTGC
CACCGCTGCTGCTGCTGCTAGCTCTGCTGCTCGCTGCCAGCCCAGGAGGCGCCTTGGCGCGGTGCCAGGCTGCG
GGCAAGGGGTGCAGGCGGGTTGTCCAGGGGGCTGCGTGGAGGAGGAGGATGGGGGGTCGCCAGCCGAGGGCTGCG
CGGAAGCTGAGGGCTGTCTCAGGAGGGAGGGGCAGGAGTGCGGGGTCTACACCCTAACTGCGCCCCAGGACTGC
AGTGCCATCCGCCCAAGGACGACGAGGCGCCTTTGCGGGCGCTGCTGCTCGGCCGAGGCCGCTGCCTTCCGGCCC
GCGCGCTGCTGTTGCAGAGGAGAATCCTAAGGAGAGTAAACCCCAAGCAGGCACTGCCCGCCACAGGATGTGA
ACCGCAGAGACCAACAGAGGAATCCAGGCACCTCTACCACGCCCTCCAGCCCAATTCTGCGGGTGTCCAAGACA
CTGAGATGGGCCCATGCCGTAGACATCTGGACTCAGTGCTGCAGCAACTCCAGACTGAGGTCTACCGAGGGGCTC
AAACACTCTACGTGCCCAATTGTGACCATCGAGGCTTCTACCGGAAGCGGCAGTGCCGCTCCTCCAGGGGCAGC
GCCGAGGTCCCTGCTGGTGTGTGGATCGGATGGGCAAGTCCCTGCCAGGGTCTCCAGATGGCAATGGAAGCTCCT
CCTGCCCCACTGGGAGTAGCGGCTAAAGCTGGGGGATAGAGGGGCTGCAGGGCCACTGGAAGGAACATGGAGCTG
TCATCACTCAACAAAAAACCGAGGCCCTCAATCCACCTTCAGGCCCGCCCCATGGGGCCCTCACCCTGTTGG
AAAGAGTGTTGGTGTGGCTGGGGTGTCAATAAAGCTGTGCTTGGGGTCAAA

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FIGURE 3601

MTPHRLLPPLLLLLLALLLAASPGGALARCPGCGQGVQAGCPGGCVEEEDGGSPAEGCAEAEGCLRREGQECGVYT
PNCAPGLQCHPPKDDEAPLRALLLGRGRCLFARAPAVAEENPKESKPQAGTARPDVNRRDQQRNPSTSTPSQP
NSAGVQDTEMGPCRRHLDVLLQLQTEVYRGAQTLYVPNCDHRGFYRKQCRSSQGGQRRGPCWCVDRMGKSLPGS
PDGNGSSSCPTGSSG

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FIGURE 3602A

GCTGGCCGTCTGCGCACCCCTCTCTCCCCTCGGCTCTTTCTAGGAAAGCTGAGCCTCATAGCTTCCGGGAGAAGG
TTTTCCGGAAGAAACCTCCAGTCTGTGCAGTATGTAAGGTGACCATCGATGGGACAGGCGTTTCGTGCAGAGTCT
GCAAGGTGGCGACGCACAGAAAATGTGAAGCAAAGGTGACTTCAGCCTGTGAGGCTTGCCCTCCCGTGGAGTTGC
GGCGAAACACGGCCCCAGTCAGGCGCATAGAGCACCTGGGATCCACCAAATCTCTGAACCACTCAAAGCAGCGCA
GCACTCTGCCCAGGAGCTTCAGCCTGGACCCGCTCATGGAGCGCGCTGGGACTTAGACCTCACCTACGTGACGG
AGCGCATCTTGGCCGCCGCTTCCCCGCGCGGCCCGATGAACAGCGGCACCGGGGCCACCTGCGCGAGCTGGCCC
ATGTGCTGCAATCCAAGCACCGGGACAAGTACCTGCTCTTCAACCTTTAGAGAAAAGGCATGACCTGACCCGCT
TAAACCCCAAGGTTCAAGACTTCGGCTGGCCTGAGCTGCATGCTCCACCCCTGGACAAGCTGTGCTCCATCTGCA
AAGCCATGGAGACATGGCTCAGTGTGACCCACAGCACGTGGTTCGTACTATACTGCAAGGGAAACAAGGGCAAGC
TTGGGGTCATCGTTTCTGCCTACATGCACTACAGCAAGATCTCTGCAGGGGCGGACCAGGCACTGGCCACTCTTA
CCATGCGGAAATTCTGCGAGGACAAGGTGGCCACAGAAGTGCAGCCCTCCAGCGTCGATATATCAGCTACTTCA
GTGGGCTGCTATCTGGCTCCATCAGAATGAACAGCAGCCCTCTCTTCTGCACTATGTGCTCATCCCCATGCTGC
CAGCCTTTGAACCTGGCACAGGCTTCCAGCCCTTCTTAAATCTACCAGTCCATGCAGCTTGCTACACATCTG
GAGTCTATCACATTGCAGGCCCTGGTCCCCAGCAGCTTTGCATCAGCCTGGAGCCAGCCCTCCTCTCAAAGGCG
ATGTCATGGTAACATGTTATCACAAGGGTGGCCGGGGCACAGACCGGACCCTCGTGTCCGAGTCCAGTTCACCA
CCTGCACCATCCACGGACCACAGCTCACTTTCCCCAAGGACCAGCTTGACGAGGCTGGACTGATGAGAGGTTCC
CCTTCCAAGCCTCCGTGGAGTTTGTCTTCTCTCCAGCCCCGAGAAGATCAAAGGCAGCACTCCACGGAACGACC
CCTCGGTCTCTGTGCACTACAACACCACTGAGCCAGCCGTGCGCTGGGACTCCTATGAGAAGTTCAACAGCACC
ACGAGGACAGTGTGGATGGCTCCTTGACCCACACCCGGGGTCCCCTGGATGGCAGTCTTATGCCAGGTGCAGC
GGCCTCCCCGGCAGACCCCCCGGCACCCCTCTCCAGAGCCTCCACCACCCCATGCTCTCTGTGTCAGCAGCGACT
CAGGCCATTCTCCACGCTGACCACAGAGCCGGCTGTGAGTCCCCTGGCCGGCCGCCCCCTACAGCTGCTGAAC
GGCAGGAGCTGGATCGCCTCCTAGGAGGCTGCGGAGTGGCCAGTGGGGGCGGGGAGCTGGGCGCGAGACGGCCA
TCCTAGATGACGAAGAGCAGCCCACTGTGGGCGGAGGCCCCACCTCGGAGTGTATCCAGGCCATAGGCCTGGCC
TCAGCCGCCACTGCTCCTGCCGCCAGGGCTACCGGGAGCCCTGCGGGGTTCCCAATGGGGGCTACTACGGGCCAG
AGGGAACCTGGAGAGGAGGCGACTGGCCTACGGGGGCTATGAGGGATCCCCCAGGGCTACGCCGAGGCCTCGA
TGGAGAAGAGGCGCCTCTGCCGATCGCTGTGAGGGGCTATACCCCTACCCACCTGAGATGGGGAACAGCCA
CTGGGGACTTTGGCTACCGCGCCCCAGGCTACCGGGAGGTGGTTCATCCTGGAGGACCCTGGGCTGCCTGCCCTAT
ACCCATGCCAGCCTGCGAGGAGAAGCTGGCGCTGCCTACAGCAGCCTTGATGGACTGCGGCTGGGACCCGCTGCCTCTGC
CTGGAGAAGGGTGGGCAAGTGAGGCTGGCAAGCCTCTCCTGCACCCAGTGCAGCCTGGGACCCGCTGCCTCTGC
TCTTGCTGCTGTGGGCATCACCATGCCCCGATGCCTGACTACAGCTGCCTGAAGCCACCCAAGGCAGGCGAGG
AAGGGCAGGAGGGTGTCTCTACACCATGTGCCCCGAAGGCAGGTATGGGCATCCAGGGTACCCTGCCCTGGTGA
CATACAGCTATGGAGGAGCAGTTCCAGTTACTGCCAGCATATGGCCGTGTGCTCATAGCTGTGGCTCTCCAG
GAGAGGGCAGAGGGTATCCAGCCCTGGTGGCCACTCCCCACGGGCTGGCTCCATTTCCCCGGGCAGCCGCCCT
ATCCACAATCTAGGAAGCTGAGCTACGAGATCCCTACGGAGGAGGGAGGGGACAGGTACCCATTGCCTGGGCACC
TGGCCTCAGCAGGACCTTTGGCATCTGCAGAGTCGCTGGAGCCGGTGTCTGGAGGGAGGGCCCCAGTGGGCACA
GCACACTGCCTCGGTCTCCCCGAGATGCCCATGTCAGTGCTTCGTGAGAGTTGTCTGGTCCCTCCACGCCCTGC
ACACCAGCAGTCCAGTCCAGGGCAAGGAAAGCACCCGGCGACAGGACACCAGGTCCCCACCTCAGCGCCCACTC
AGAGACTGAGTCTGGCGAGGCTTGCCCCCTAGCCCCAGTCTCTCCGACCTTCCCTCCAGCTCGCCAGTGAAGTGCCTC
AGGAAAGGAGTCCAGGGGGCCACTCAGATGGCGCCAGTCTCGGAGCCCTGTGCCACCACTTCTTGGCCTCC
GCCACGCCCCCTGGCAAGGCCCTCGAGGCCCCCCGACAGCCAGATGGGTCTCCCTCACTCCTGTGCCTTCCC
AGATGCCCTGGCTTGTGGCCAGCCAGAGCCGCTCAGAGCTCACCTACACCTGCTTTCCCCCTGGCTGCCTCCT
ATGACACCAATGGCCTTAGCCAGCCCCCACTTCTGAGAAACGCCACCTGCCCGGGCGGGGCAACAGCCAGGAC
CCTGGGGGCCAGAGCAGGCATCATCGCCAGCCAGAGGCATCAGTACCATGTACCTTCGACCTCTGCTCTCAG
ATAATGTCCCCCAAACCCAGAGCCTCTACACAAGAGAGCCAAAGCAATGTCAAGTTGTCCAGGATACATCCA
AGTTCTGGTACAAGCCACACCTGTCCCGTGACCAAGCCATTGCCCTGCTGAAGGACAAGGACCCTGGGGCCTTCC
TGATCAGGGACAGTCATTCAATTCCAAGGAGCTTATGGGCTGGCCCTCAAGGTGGCCACACCGCCACCCAGTGCCC
AGCCCTGGAAAGGGGACCCCGTGGAAACAGCTGGTCCGCCATTTCTCATCGAGACTGGGCCCCAAGGGGTGAAGA

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FIGURE 3602B

TCAAGGGCTGCCCCAGTGAGCCCTACTTTGGCAGCCTGTCCGCCTTGGTCTCCCAGCACTCCATCTCCCCATCT
CCCTGCCCTGCTGCCTGCGCATTCCCAGCAAAGATCCTCTGGAAGAGACCCAGAGGCTCCAGTGCCCACCAACA
TGAGCACAGCGGCAGACCTCCTGCGTCAGGGTGCTGCCTGCAGCGTGCTCTACTTGACCTCAGTGGAGACAGAGT
CACTGACGGGCCCCAAGCTGTGGCCCGGGCCAGCTCTGCAGCTCTGAGCTGTAGCCCCGCCGACACCAGCTG
TTGTCCAÇTTCAAGGTGTGAGCCAGGGCATTACACTGACGGACAACCAAAGGAAGCTCTTCTTTCGCCGCCATT
ATCCAGTGAACAGCATCACCTTCTCCAGCACTGACCCTCAAGACCGGAGATGGACCAACCCAGACGGGACCACCT
CCAAGATCTTTGGTTTCGTGGCCAAGAAGCCGGAAGCCCCCTGGGAGAATGTGTGTCACCTCTTTCAGAGCTTG
ACCCAGATCAGCCTGCTGGCGCCATTGTACCTTCATCACCAAAGTTCTACTGGGCCAGAGAAAATGAAGGAAGG
CCACAAGCTCAGAGCCACATCAACACTGCCCCCTCCCAGCACCCACAGCCCTCACATCCCCTGGCCTGGACC
CAGGAGACCCAGGAGAAAGCACCTCCCTTAGGAATGAGGAGTGGGCATCAGGCCTGGGACACTGCTCTCCTTCC
CCGCCCCCAGCCTGCTAAGTTAAGTGGACAGGCCACAAGATGACCTTGCAATGTGAGCAGATGGCAGAGATGGGT
GTGTGAGGGGTGAGGAGGCATCAGCAGTTGAGCCCCGAAGGAGATCAGGCAGCCCCACCTGCAGGAGAACGTGAG
CCCTCCAGGGGATCAGCCCCTGCCAGTTCCACCCAGCTGCAGGTGCCAGCACGGCAGGGATGGGAGAGGGGTGGG
GAGCGAGTCACCTGCTCTCTGAGCAGAGATTCAGAGTAGGATCACATGAATAGGGGAAAAAAGAGAGTCTATTT
TTGTCTAATAATAAAGAATTTCTATAAACTTT

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FIGURE 3603

MKSSGPVERLLRALGRRDSSRAASRPRKAEPHSFREKVFRKKPPVCAVCKVTIDGTGVSCRVCVATHRKCEAKV
TSACQALPPVELRRNTAPVRRIEHLGSTKSLNHSKQRSTLPRSFSLDPLMERRWDLDTYVTERILAAAFPARPD
EQRHRGHLRELAHVLSKHRDKYLLFNLSEKRHDLTRLNPKVQDFGWPELHAPPLDKLCSICKAMETWLSADPQH
VVVLYCKGNKGKLGVIIVSAYMHYSKISAGADQALATLTMRKFCEDKVATELQPSQRRYISYFSGLLSGSIRMNSS
PLFLHYVLIPMLPAFEPGTGFQPFLLKIYQSMQLVYTSGVYHIAGPGPQQLCISLEPALLLKGDMVTCYHKGGRG
TDRTLVRVQFHTCTIHGQQLTFPKDQLDEAWTDERFFQASVEFVFSSESPEKIKGSTPRNDPSVSVDYNTTEPA
VRWDSYENFNQHHEDSVDGSLTHTRGPLDGSPYAQVQRPPRQTPPAPSPPEPPPPMMLSVSSDSGHSSTLTTEPAA
ESPGRPPPTAAERQELDRLLGGCGVASGGRGAGRETAILDDEEQPTVGGGPHLGVPYGHHPGLSRHCSCRQGYRE
PCGVPNGGYYRPEGTLERRRLAYGGYEGSPQGYAEASMEKRRLCRSLSEGLYPYPPEMGKPATGDFGYRAPGYRE
VVILEDPLPALYPCPACEEKLALPTAALYGLRLEREAGEGWASEAGKPLLHPVRPGHPLPLLLPACGHHHAPMP
DYSCLKPPKAGEEGHEGCSYTMCEGGRYGHYPALVTYSYGGAVPSYCPAYGRVPHSCGSPGEGRGYPSPGAHS
PRAGSISPGSPFPYQSRKLSYEIPTEEGGDRYPLPGHLASAGPLASAESLEPVSWREGPSGHSTLPRSPRDAPCS
ASSELGSPSTPLHTSSPVQKKESTRRQDTRSPTSAPTQRLSPGEALPPVSQAGTGKAPELPSGSGPEPLAPSPVS
PTFPSPSPDWPQERSPGGHS DGASPRSPVPTTLPLGLRHAPWQGRGPPDSDGSP LTPVPSQMPWLVASPEPPQ
SSPTPAFPLAASYDTNGLSQPPLPEKRHLPGPGQQPGPWGPEQASSPARGISHHVTFAPLLSDNVPQTPEPPTQE
SQSNVKFVQDTSKFWYKPHLSRDQAIALLKDKDPGAFLIRDSHSFQAYGLALKVATPPPSAQPWKGDPVEQLVR
HFLIETGPKGVKIKGCPSEPYFGSLSALVSQHSISPISLPCCLRIPSKDPLEETPEAPVPTNMSTAADLLRQGAA
CSVLYLTSVETESLTGPQAVARASSAALSCSPRPTPAVVHFKVSAQGITLTDNQRKLFRRHYPVNSITFSSTD
QDRRWTPDGTTSKIFGFVAKKPGSPWENVCHLFAELDPDQAGAIVTFITKVLLGQRK

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FIGURE 3604

AATCTAGCCCGGGAACCGAGTTGCGGGAGTGCGGTCTGTGCCGTTCCGGCCAGGAGTTTGCCGACTGCAGACGTC
CTGCGAACCGGCAAGATGTGCTCTCTGGGGTTGTTCCCTCCTCCACCGCCTCGGGGTCAAGTCACCCTATATGAG
CACAATAACGAGCTGGTGACGGGCAGTAGCTATGAGAGCCCCGCCCCCGACTTCCGGGGCCAGTGGAATCAATCTT
CCTGTCTTACAACGACAAAGGATCCCCATAAGACCCCTGGAAGGCTGGACCATGGCACAAGAAGTGCCTTCATC
CATCACCGGGAGCAAGTGTGGAAGAGATGCATCAACATTTGGCGTGATGTGGGCCTTTTTGGGGTGCTAAATGAA
ATTGCAAACCTCAGAAGAAGAGGTGTTTGAGTGGGTGAAGACGGCATCCGGCTGGGGCCTGGCACTCTGTGATGG
GCCTCTTCCCTCCATGGGTCCCTGTTCCCCCATCTGTCTCTCAGGAGCGAAGATCTGATCGCTGAATTTGCCCAA
GTCACAAATTGGTCCAGCTGCTGCTTGCGTGTCTTTGCAATGGCAGCCCCACACCAACAAGTTTGCAGTGGCCCTG
CTAGATGACTCAGTCCGTGTGTATAATGCCAGCAGCACCATAGTCCCCTCCCTGAAGCACCGGCTGCAGCGAAAT
GTGGCGTCTCTGGCCTGGAAGCCCCCTAGTGCCCTCTGTCTTGGCTGTGGCCTGCCAGAGCTGCATTCTTATCTGG
ACCCTGGACCTACCTCCTTGTCTACCCGACCCCTCTTCTGGCTGTGCCCAAGTGTGTCTCACCTGGGCATACA
CCTGTTACCAGCTTGGCCTGGGCCCCCAGTGGGGGGCGGCTGCTCTCAGCTTCACCCGTGGATGCTGCTATCCGG
GTATGGGATGTCTCAACAGAGACCTGTGTCCCCCTTCCCTGGTTCCGAGGAGGTGGGGTGACCAACCTGCTCTGG
TCCCCAGACGGCAGCAAAATCCTGGCTACCACTCCTTCAGCTGTCTTTCGAGTCTGGGAGGCCAGATGTGGACT
TGTGAGAGGTGGCCTACTCTATCAGGGCGCTGTCAGACTGGCTGCTGGAGCCAGATGGCAGCCGACTGCTGTTT
ACTGTATTGGGAGAGCCACTGATTTACTCCCTGTCTTTTCCAGAACGTTGTGGTGAGGGAAAGGGGTGCGTTGGA
GGTGCAAAGTCAGCAACGATTGTGGCAGATCTGTCTGAGACAACAATACAGACACCAGATGGTGAGGAGAGGCTT
GGGGGAGAGGCTCACTCCATGGTCTGGGACCCCACTGGGGAAACGTCTGGCTGTGCTTATGAAAGGAAAGCCAAGG
GTACAGGATGGTAAACAGTCATCTCCTTTTTTCGCACTCGAAACAGCCCTGTGTTTGAGCTCCTTCCCTGTGGC
ATTATCCAGGGGGAGCCAGGAGCCAGCCCCAGCTCATCACTTTCCATCCTTCCCTCAACAAAGGGGCCCTGCTC
AGTGTGGGCTGGTCCACAGGCCGAATTGCCACATCCCGCTGTACTTTGTCAATGCCAGTTTCCACGTTTTAGC
CCAGTGCTTGGGCGGGCCCCAGGAACCCCTGCTGGGGGTGGAGGCTCTATTTCATGACCTGCCCCTCTTTACTGAG
ACATCCCCAACCTCTGCCCCCTGGGACCCCTCTCCAGGGCCACCACCTGTTCTGCCCCACTCCCCACATTCCCAC
CTCTAAGAATAAATAAGTTTTCTTTTTGTTTTCCACTCA

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FIGURE 3605

MCSLGLFPPPPPRGQVTLYEHNNELVTGSSYESPPPDFRGQWINLPVLQLTKDPLKTPGRLDHGTRTAFIHHREQ
VWKRCINIW RDVGLFGVLNEIANSEEEVFEWVKTAGWALALCRWASSLHGSLFPHLSLRSEDLIAEFAQVTNWS
SCCLRVFAWHPHNTKFAVALDDSVRVYNASSTIVPSLKHRLQRNVASLAWKPLSASVLAVACQSCILIWTL DPT
SLSTRPSSGCAQVL SHPGHTPVTSLAWAPSGGRLLSASPVDAAIRVWDVSTETCVPLPWFRGGGVTNLLWSPDGS
KILATTPSAVFRVWEAQMWTCERWPTLSGRCQTGCWSPDGSRLLF TVLGEPLIYSLSFPERCGEGKGC VGGAKSA
TIVADLSETTIQTPDGEERLGGEAHSMVWDPSGERLAVLMKGKPRVQDGKPVILLFRTRNSPVFELLPCGIIQGE
PGAQPQLITFHPSFNKGALLSVGWSTGRIAHIPLYFVNAQFPRFSPVLGRAQEPPAGGGGSIHDLPLFTETSPTS
APWDPLPGPPPVLP HSPHSHL

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FIGURE 3606

AACGGGATGGGGAGCTGGACCAGCAGATTATGAGCTTACAGAAAGCCTGGCCTACATTTTACTCTTTTTTGGATTT
CTTCCTCATCAAGAGACTGCTGCAGTGCCTGTCATGTGACAGCGGCATGGACATATGCCCCAGGCTTTCCTGCTG
GGGTCCATCCATGAGCCTGCAGGTGCCCTCATGGAGCCCCAGCCCTGCCCTGGAAGCTTGGCTGAGAGCTTCCTG
GAGGAGGAGCTTCGGCTCAATGCTGAGCTGAGCCAGCTGCAGTTTTTCGGAGCCTGTGGGCATCATCTACAATCCC
GTGGAGTATGCATGGGAGCCACATCGCAACTACGTGACTCGCTACTGCCAGGGCCCCAAGGAAGTACTCTTCCTG
GGCATGAACCCCTGGACCTTTTGGCATGGCCCAGACTGGGGTGCCCTTTGGGGAAGTAAGCATGGTCCGGGACTGG
TTGGGCATTGTGGGGCCTGTGCTGACCCCTCCCCAAGAGCATCCTAAACGACCAGTGCTGGGACTGGAGTGCCCA
CAGTCAGAAGTGAGTGCTGCCGATTCTGGGGCTTTTTCCGGAACCTCTGTGGACAGCCTGAGGTCTTCTTCCAT
CACTGTTTTGTCCACAATCTATGCCCTCTGCTTTTTCTGGCTCCCAGCGGGCGCAACCTTACTCCTGCTGAGCTG
CCTGCCAAGCAGCGAGAACAGCTTCTTGGGATCTGTGATGCAGCCCTCTGCCGGCAGGTGCAGCTGCTGGGGGTG
CGGCTGGTGGTGGGAGTTGGGCGACTGGCAGAGCAGCGGGCACGACGGGCTCTGGCAGGCCTGATGCCAGAGGTC
CAGGTGGAAGGGCTCCTGCATCCCTCTCCCCGTAACCCACAGGCCAACAAAGGGCTGGGAGGCAGTGGCCAAGGAA
AGATTGAATGAGCTGGGGCTGCTGCCACTGCTGTTGAAATGAGTGCCCTTGGGGCCTTGATGGGACACATTCAA
GACCTCGAAGTCATTCTTGGCCAAGCAGATGACAACACATCTCCTGGACTGGAGCAAAAGGTCCTTCTGTGCACC
CTGGTCGCTGGGAAACGTATTCTTTGATCTGTTGAACTGTCTTCCAACCTGCCATGGCAGTTTTGACACTACTCC
TGTTTGCCCTCCTGATTCTGCTTTCTTTACCTTTTAACATTGCCCTTTTCAGGGGACCCCACTTTGTAGGGAAT
CTGCAGAAGGTGTGCTTTTGCACCTGCAGACTGCTCTACCTCAGTGTTTTCTTGGGAGACTTTATTAGCTGAGA
GTGCCCTAGACAGTAACTTCTAAGGTACAGTTTACTATTTTCAAGGAAATATCTTGCCAGGATACCTACCCATCC
TTATAGAACAGTTACCTTTAGCTGACCCCTTTCTCAGAGGGACCAAGACAAAGCATGGGACATGAAATTAAGAG
TGAACCTTCTATGGGAGGCTGCAGCTGGATCAGAGGAAAAATCCAGTGTGACAGAGTGCAAGTCAGAAGACCTGG
CTTTTCATCCCAGCTTTGAAACTTGGAACTTTTTGATTGACAAATTAATAAACCTCTCTATGCCTCAGGC

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FIGURE 3607

MPQAFLLGSIHEPAGALMEPQPCPGSLAESFLEELRLNAELSQLQFSEPVGIIYNPVEYAWEPHRNYVTRYCQG
PKEVLFLGMNPGPFGMAQTGVPFGEVSMVRDWLGIVGPVLTTPQEHKRPVVGLECPQSEVSGARFWGFFRNLCG
QPEVFFHHCFVHNLCPLLFLAPSGRNLTPAELPAKQREQLLGICDAALCRQVQLLGVRLLVVGVRGLAEQRARRAL
AGLMPEVQVEGLLHPSRNPQANKGWEAVAKERLNELGLLPLLLK

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FIGURE 3608

TGACCCTAACAGTCGATTCAAGGCCAAGTGGTCAGTTTGTGAGCCTTTTTTAAGGGATTTCCTTTTATTTTATAGG
AATTCCAAACAGAGTTAACCTAACTGTCATTGCCAAAAGATCAGTCTTAACTTTCTTAGCACCTGTACCTGTT
TAATGTGATCAGCTATCAGTGAGGAAAAAAAAAAAAATCTATTTAGGTCTTGGAATGGTTCCTGTACCTAGAGTA
TCCATATTGAACCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGTAGATGGAACTTGCTCTTTTGCCAGGCTGGAG
TGCACTGGCGTGATCTTGGCTCACTGCAACCTCCGCCTCCCGGGTTCAAGCAGTTCTCTGCCTCAGCCTCCTGAG
CAGCTGGGATTATAGGCGCTGCCACCATGCCCGGCTAATTTTGTATTTTATAGTAGAGACAGGGTTCACCATCT
TGGCCGTGCTGGTCTTGAACCTCTGACCTTGATCCGCCTGCCTCGGCCACTCAAAGTGCTGGGATTGCAGGCG
TGAGCCAGCACCCGGCCACAGTATCTTATTACAGCTCACTGCAGCCTCAATCTCCTGGGCTCAAATGATCCTCC
TGCCTCAGCCTCCCAAGCAGCTGGGACTACAGGCGCACACCACGGTGTCTGGCTAATTTTATTATTTAAAAATG
TTTTGTAGAGACAGTCTCCCTGTGTGCCCAGGCTGGTCTCCAACCTCGTGAGCTCAAGTGATCCACGTGCCTCAG
CCTCCCAAAGTGCTGGGATTACAAGCATAAGCCACCGCACCCGGCCCCCTAGTGAACATTTTACTGTATGTGTTGA
TAAATCATCTTTTGTAGTTTCTGTGTATGTGGGGACTTCCTACACTGGCTGCTGTGAAGAGGTATGGAAGAAAGG
AGAGGCTTTCTGCCTAGAAATCTTTGAGAACACCTGAAAAGACAGTTTAAATCATGTACAACTCTTAAGGCT
CAAGTCAGTGTTCTGGTTTCCGGTAGCTTTAGGATTGGATTCTAAACGAGGGCTGGTGGTGAGTTTGGTGTGTTGT
CTCGTGTCACCCCTCACCCCTCACCTCCTCAGTTTAGGATAAGAGACATAATGATTTCTACCAGAATCCAAAGTAA
ATCCAAAGGGGGGAGAAAAGACATAACTGTTTTTTCTTCTACCTTTTTTTTGTAAAGAGTTACATCTCTCACAGG
AGGAAAGAATTCAAGAGTCTATATGATTAGTTACAGAGAATATTTTCATCCCTCTCCCTGAATAGAAAAGCAGG
GGTCACCATTTGTATCCTTACCCCTTGAGGTGTTTTTGAAGATGCTGTAACCTCTTGAAGTTGAGCTGAGGCAGAAA
GGTTGGAAAAATGCAGCCCTCTGGGTATTGTGGGGAGGGATGTGATGTAGTAAGAGGGTGTGTTGTGGTGCTAGG
ATTCCACGCCACCAACTTGACGCTTTATAAGAGCGCTACCAAGAACCACCTGGGGAAAAGGTTCTTATTCAI
TGTTTCTGTGGAATGTGATCTTGCTTTCTGGATTTTAGGAATTCAGGTTACTCAGTATAAACTCTGAGAAATC
AGTGTGACTTAGTCTTCACTCCTAAGATAAAGTGAATATTTCTTTACAAAATAATTATGTCTTAAATGTTAA
AGATGTAATTTTATTTTCAAAACATCTATAACATGACTTTTCAAGAGCAGTTTCAATTTTCCAAGATTCTCACATT
ATACTAGATAAAATAATAGGCCCTCAGTTAATACCCTTCAGTTATTGAATTAATCTAGTTTGTGGAATGAGGTGTA
TCCTGCCAACTTCCCTCTGCTCCCAAGTACACTCTGAGAGGTAAAATGCTCTGGGAAATGGAACAAGAATCGAGT
GGATGCTGACTCTGTGTGCCACCTCCTCAACTGATTGATAATGGTTGACCTTGGGCAAGTCACTTCTTCAATG
CCTCAGTTCCCCATCTGTCAAATGGGGTTAATAACTGACCTACCTCACAGGGGTGTTGTTGTGAGGCATTGTA
AATCAAAGTTAATAGAATACTTCAGGGTCTCTGTGGAGGATGTCTTGAGCCAGAGTTTAAAGCCTGACACACAGG
CTTTGGTCTCTACTGAGCTGTCTCCAAGACTGGAACCTACTTAGTGACTCGGCAAATTTTCTGCCCCCACCCTC
ATCAAAGCTGCTAGTTAGATGTTGACAGTGTTTTCATGAATGTTGGAATCTTACTAGTCCAGACTTACTTAGGA
TGTTGTTGGGGAAGGCACCTGGGATTTTCTGTGTCTTGCAATTCACAGAGGGAGGCCATTTAGATTCAAGAGCAT
TGGATTAGGGAATCGTGAGGCAGGGATGCTACTGCGTATTTCTCTCTGCAGGTTGGGGATTAAAGTTCCTTTCCC
CATGGGTTTGAAGCAGACTCAGACTGTCTCAGGATCAAAGCAACCCTCAATGGTTTTGATTTATGTATTGCTTA
CCACTCCCCAACCAATCCCAGGACAGCTGGGTCACTGTACCCCTTTGTGGTATCTGTACCTGGGCCTCTCCTTCC
TCATAGGGACCACTGATTGAATAAATGTGACCACCTTATTTCCACCCCCACCCCCAAAAGCTACATTGGAATT
ATTTTTCCTAGAAATGTGTATAAAGCTCAGAAATGGGCATTGATCCTTAAAGCTTCATCCCATTCACCGTATTCA
ACATCTGTATCTCTTAGTGTCTGAGTCTGAACCTAACCTTGACCTTTTTTCCCTCTGGTTTGAGAAAACCTTG
GACACTATTTTCTACTTGGCCAGGTGTGGGCTCAAGAGCCTTACTCTTTCCATCTCAGTTTAGGGGCGCAGCCAGC
TCCTCTTCCCAATAGGGCTCTTTCTGCTTTCCCTCTCCTTGGCCCTAGATTGTAATCCATGAAAAAGCACAAAGG
TCCTGGCTCCTTGCGGTCACTTCTGGTTCTCTGTGTTTTGTGGACTCTGCTCTCACTGTTACCCAGCACTAGC
AGTACCAGATGGTTCTGTGGAGTCTGGGGAATGGAGAGAGCACAGTCTGACTCCCTGCCAAGTAGCCAGGAGTT
GACTTGGCCATGGTCCGCTGGCTTTCCACCCTTCTTACAGGATGGGATCTAAGAGACTCAAGAGCTGGGTTTC
TTTCAGCACTCTGTACTGTCCAAATAGCAAACAAATCACTTTGTAGCCAGATTTCTGAATGGAATGAGAAAT
GAATCTCCATGGACTTTTAGGTTTATGGGGAGTTTTAGCTGTGTTTCTTGGTTTTATTTCAGCCAAACATGTC
TGCTTTTGTATTTTTTTTTTAAAGTATAAGTGGTCTATATATATGTTACCTTTTAAATGTAAATGTTTAAAAAGT
AAGCATTTATGTGTTTCCATAACTGACATCTGATGCAGACCTCATTCTCTCCCCCTCTTCTACCCCTCCTCTTTTC
CCCCTTTTCATACTCTTGTATTGGTTCTAATAAATGGTTGCTTTTC

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FIGURE 3609

MVDLGQVTSFNASVPHLSNGVNNNTDLPHRGVVVRHCKSKLIEYFRVLCGGCLEPEFKPDTQALVLTLSRLELL
SDSANFLPPTPHQSC

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[illegible]

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FIGURE 3611

MWNPAGQPGPNPYPPNIGCPGGSNPAHPPPINPPFPPGPCPPPPGAPHGNPAFPPGGPPHPVPQPGYFGCQPLG
PYPPPYPPFAPGIPPVNPLAPGMVGPVIVDKKMQKKMKKAHKKMHKHQKHHKYHKGKHSSSSSSSSSDSD

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FIGURE 3612

GAGAGGGCGAAGGTAGGCTGGCAGATACGTTTCGTACAGCTTGCTCCTTTCTGCCCGTGGACGCCGCCGAAGAAGCA
TCGTTAAAGTCTCTCTTCACCCTGCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCCGAACAGCTGAGGAAGC
TCTTCATTGGAGGGTTGAGCTTTGAAACAACCTGATGAGAGCCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCA
CGGACTGTGTGGTAATGAGAGATCCAAACACCAAGCGCTCTAGGGGCTTTGGGTTTGTACATATGCCACTGTGG
AGGAGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAGAGAGCTGTCT
CCAGAGAAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACA
CTGAAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAG
GCAGTGGCAAGAAAAGGGGCTTTGCCTTTGTAACTTTGACGACCATGACTCCGTGGATAAGATTGTCATTTCAGA
AATACCATACTGTGAATGGCCACAACCTGTGAAGTTAGAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCAT
CCAGCCAAAGAGGTGGAAGTGGTTCTGGAACCTTTGGTGGTGGTTCGTGGAGGTGGTTTCGGTGGGAATGACAACCT
TCGGTCGTGGAGGAACTTCAGTGGTTCGTGGTGGCTTTGGTGGCAGCCGTGGTGGTGGTGGATATGGTGGCAGTG
GGGATGGCTATAATGGATTGGCAATGATGGTGGTTATGGAGGAGGCGGCCCTGGTTACTCTGGAGGAAGCAGAG
GCTATGGAAGTGGTGGACAGGGTTATGGAAACCAGGGCAGTGGCTATGGCGGGAGTGGCAGCTATGACAGCTATA
ACAACGGAGGCGGAGGCGGCTTTGGCGGTGGTAGTGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTTTG
GGAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCCT
ATGGCGGTGGAGGCCAATACTTTGCAAAACCACGAAACCAAGGTGGCTATGGCGGTTCCAGCAGCAGCAGTAGCT
ATGGCAGTGGCAGAAAGATTTTAAATTAGGAAACAAAGCTTAGCAGGAGAGGAGAGCCAGAGAAGTGACAGGGAAGC
TACAGGTTACAACAGATTTGTGAACCTCAGCCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAAGAAGACATGT
TTTAGACAAATACTCATGTGTATGGGCAAAAACTCGAGGACTGTATTTGTGACTAATTGTATAACAGGTTATTT
TAGTTTCTGTTCTGTGGAAAGTGTAAGCATTCCAACAAAGGGTTTTAATGTAGATTTTTTTTTTTTGCACCCCAT
GCTGTTGATTGCTAAATGTAACAGTCTGATCGTGACGCTGAATAAATGTCTTTTTTTTTTAATGTGCTGTGTAAAGT
TAGTCTACTCTTAAGCCATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAGAATTCCTTCAGGGTGATGCCAGGT
TCTATTTGGAATTTATATACAACCTGCTTGGGTGGAGAAGCCATTGTCTTCGGAACCTTGGTGTAGTTGAAGT
ATAGTTACTGTTGTGACCTGAAGTTCACCATTAAGGGATTACCCAAGCAAAATCATGGAATGGTTATAAAGT
GATTGTTGGCACATCCTATGCAATATATCTAAATTGAATAATGGTACCAGATAAAATTATAGATGGGAATGAAGC
TTGTGTATCCATTATCATGTGTAATCAATAAACGATTTAATTCTCTTGAA

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FIGURE 3613

MSKSESPKEPEQLRKLFIGGLSFETTDESLSHFQWGTLTDCVVMRDPNTKRSRGFGFVITYATVEEVDAAMNAR
PHKVDGRVVEPKRAVSREDSQRPGAHLTVKKIFVGGIKEDTEHHHLRDYFEQYGKIEVIEIMTDRGSGKKRGFAF
VTFDDHDSVDKIVIQKYHTVNGHNCEVRKALSKQEMASASSSQRGRSGSGNFGGGRGGGFGGNDNFGRGGNFSGR
GGFGGSRGGGGYGGSGDGYNGFGNDGGYGGGGPGYSGGSRGYGSGGQGYGNQGSYGGSGSYDSYNNGGGGGFGG
GSGSNFGGGGSYNDFGNYNQSSNFGPMKGGNFGGRSSGPYGGGGQYFAKPRNQGGYGGSSSSSYGSGRRF

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FIGURE 3614

GCTCTTGGGTTCTGTAGTTTTCTCGCGATCCAAAAGGCTCCGTGCCCCAAAGCAAATGCTGGCCGCCAACCCAGGC
AAGACCCCGATCAGCCTTCTGCAGGAGTATGGGACCAGAAATAGGGAAGACGCCTGTGTACGACCTTCTCAAAGCC
GAGGGCCAAGCCCACCAGCCTAATTTACCTTCCGGGTACCGTTGGCGACACCAGCTGCACTGGTCAGGGCCCC
AGCAAGAAGGCAGCCAAGCACAAAGGCAGCTGAGGTGGCCCTCAAACACCTCAAAGGGGGGAGCATGCTGGAGCCG
GCCCTGGAGGACAGCAGTTCTTTTTCTCCCCTAGACTCTTCACTGCCTGAGGACATTCCGGTTTTTACTGCTGCA
GCAGCTGCTACCCCAAGTTCCATCTGTAGTCTTAACCAGGAGCCCCCCCCATGGAAGTGCAGCCCCCTGTCTCCCCT
CAGCAGTCTGAGTGCAACCCCGTTGGTGCTCTGCAGGAGCTGGTGGTGCAGAAAGGCTGGCGGTTGCCGGAGTAC
ACAGTGACCCAGGAGTCTGGGCCAGCCCACCGCAAAGAATTACCATGACCTGTCGAGTGGAGCGTTTCATTGAG
ATTGGGAGTGGCACTTCCAAAAAATTGGCAAAGCGGAATGCGGCGGCCAAAATGCTGCTTCGAGTGCACACGGTG
CCTCTGGATGCCCGGGATGGCAATGAGGTGGAGCCTGATGATGACCACTTCTCCATTGGTGTGGGCTCCCGCCTG
GATGGTCTTCGAAACCGGGGGCCAGGTTGCACCTGGGATTCTCTACGAAATTCAGTAGGAGAGAAGATCCTGTCC
CTCCGCAGTTGCTCCCTGGGCTCCCTGGGTGCCCTGGGCCCTGCCTGCTGCCGTGTCCTCAGTGAGCTCTCTGAG
GAGCAGGCCTTTCACGTGAGCTACCTGGATATTGAGGAGCTGAGCCTGAGTGGACTCTGCCAGTGCCTGGTGGAA
CTGTCCACCCAGCCGGCCACTGTGTGTGTCATGGCTCTGCAACCACCAGGGAGGCAGCCCGTGGTGAGGCTGCCCGC
CGTGCCCTGCAGTACCTCAAGATCATGGCAGGCAGCAAGTGAAGCCCCAGCTGGACTCATGGATGTGCACCCCTT
GCTCCCTGCTCTTCTGCCTCTGGGCTCATGTATCTGCGCAGCTCTGGTACCCTCTGTGGGTGCCATCTCTACCT
CTGACACAGACTGCCTGCCTTGAAGCTGAGAAGGCACAGGGCAAGGAGCCAAGGACCACAGAGCCTCAGCCAGCC
CAGGATCCGTCCATTTTATTGGTGATGATGAATGGGAATGAAATCAGGGGGCTGTCTACTAGAGCCTGGAATA
AATATGCTGCTTTGTGGATTTTAA

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FIGURE 3615

MLAANPGKTPISLLQEYGTRIGKTPVYDLLKAEGQAHQPNFTFRVTIVGDTISCTGQGSPSKKAAKHKAAEVALKHLK
GGSMLEPALEDSSSFSPLDSSLPEDIPVFTAAAAATPVPSVVLTRSPPMELQPPVSPQQSECNPFVGALQELVVQK
GWRLPEYTVITQESGPAHRKEFTMTCRVERFIEIGSGTSKKLAKRNAAKMLLRVHTVPLDARDGNEVEPDDDHFS
IGVGSRLDGLRNRPGCTWDSLRSVGEKILSLRSCSLGSLGALGPACCRVLSELSEEQAFHVSYLDIEELSLSG
LCQCLVELSTQPATVCHGSATTREAAERGEAARRALQYLKIMAGSK

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FIGURE 3616

GCCTCTCCAGCTGCGACACAGATGGCGCGCGGGCTCTTGGGTTCTGTAGTTTTCTCGCGATCCAAAAGGCTCCGT
GCCAAGTGAGTCCTTACCGCTCCCTACCCAGCGGCTTCCCCTCCGCTAGTACGCATGTCCACAGCTTCACGGA
CCGGGAGAGAGGGGGCGCGGAAGGAAGGAGGCGGGACGGTATTACAAACAAAAAATACGGCCTTCTCGAGAAGC
GACGGCGGAGGGCCCCGCTCCTCCAGAAGGCGGTGCAGCCTGCCCGGGCGAGCCACGCACGCAGAGGGTTGTGGG
GCGGATAGCTCCCCCTCCAGATGGAGGCTCACGAAGTAGGGTGGGCGGGGGACTCCATATCCAGCGTGCCCCGCG
GCGGGCCCTACCGGCCGCGACTCCGGGCTTGCCCCGGCCCTAGCTCGTTCGGCTGTGTATTGGGGCGCGTGGAGG
CTGCAGTCACGGTGGCGCCCCGCGGGACGGAGGAGGGAATGAGTGAAGAGGAGCAAGGCTCCGGCACTACCACGG
GCTGCGGGCTGCCTAGTATAGAGCAAATGCTGGCCGCCAACCAGGCAAGACCCCGATCAGCCTTCTGCAGGAGT
ATGGGACCAGAAATAGGGAAGACGCTGTGTACGACCTTCTCAAAGCCGAGGGCCAAGCCCACCAGCCTAATTTCA
CCTTCCGGGTACCGTTGGCGACACCAGCTGCACTGGTCAGGGCCCCAGCAAGAAGGCAGCCAAGCACAAAGGCAG
CTGAGGTGGCCCTCAAACACCTCAAAGGGGGGAGCATGCTGGAGCCGGCCCTGGAGGACAGCAGTTCTTTTTCTC
CCCTAGACTCTTCACTGCCTGAGGACATTCCGGTTTTTACTGCTGCAGCAGCTGCTACCCCAAGTTCCATCTGTAG
TCCTAACCAGGAGCCCCCCCCATGGAAGTGCAGCCCCCTGTCTCCCCTCAGCAGTCTGAGTGAACCCCGTTGGTG
CTCTGCAGGAGCTGGTGGTGCAGAAAGGCTGGCGGTTGCCGGAGTACACAGTGACCCAGGAGTCTGGGCCAGCCC
ACCGCAAAGAATTACCATGACCTGTGAGTGGAGCGTTTCATTGAGATTGGGAGTGGCACTTCCAAAAAATTGG
CAAAGCGGAATGCGGCGGCCAAAAATGCTGCTTCGAGTGCACACGGTGCCTCTGGATGCCCGGGATGGCAATGAGG
TGGAGCCTGATGATGACCACTTCTCCATTGGTGTGGGCTCCCGCCTGGATGGTCTTCGAAACCGGGGGCCAGGTT
GCACCTGGGATTCTCTACGAAATTAGTAGGAGAGAAGATCCTGTCCCTCCGCAGTTGCTCCCTGGGCTCCCTGG
GTGCCCTGGGCCCTGCCTGCTGCCGTGTCTCAGTGAGCTCTCTGAGGAGCAGGCCTTTCACGTCAGCTACCTGG
ATATTGAGGAGCTGAGCCTGAGTGGACTCTGCCAGTGCTGGTGGAACTGTCCACCCAGCCGGCCACTGTGTGTC
ATGGCTCTGCAACCACCAGGGAGGCAGCCCGTGGTGGGCTGCCCGCCGTGCCCTGCAGTACCTCAAGATCATGG
CAGGCAGCAAGTGAAGCCCCAGCTGGACTCATGGATGTGCACCCTTTGCTCCCTGCTCTTTCTGCCTCTGGGCTC
ATGTATCTGCGCAGCTCTGGTACCCTCTGTGGGTGCCATCTCTACCTCTGACACAGACTGCCTGCCTTGAAGCTG
AGAAGGCACAGGGCAAGGAGCCAAGGACCACAGAGCCTCAGCCAGCCCAGGATCCGTCTCATTTTATTGGTGAT
GATGAATGGGAATGAAATCAGGGGGCTGTCTACTAGAGCCTGGAATAAATATGCTGCTTTGTGGATTTTTAAAAA
AAAAAAAAAAAAA

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FIGURE 3617

MSEEEQGS GTT TGCGLPSIEQMLAANPGKTPISLLQEY GTRIGKTPVYDLLKAEGQAHQPNFTFRVTVGDT SCTG
QG PSKKA AKH KAAEVALKHLKGGSMLEPALEDSSSF SPLDSSLPEDIPVFTAAAAATPVPSVVLTRSPPMELQPP
VSPQQSECNFVGALQELVVQKGWRLPEYTVTQESGPAHRKEFTMTCRVERFIEIGSGTSKKLAKRNAAAKMLLRV
HTVPLDARDGNEVEPDDDHFSIGVGSRLDGLRNRGPGCTWDSL RNSVGEKILSLRSCSLGSLGALGPACCRVLSE
LSEEQAFHVS YLDIEELSLSGLCQCLVELSTQPATVCHGSATTREAAARGEAAARRALQYLKIMAGSK

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FIGURE 3618

GCCTCTCCAGCTGCGACACAGATGGCGCGCGGGCTCTTGGGTTCTGTAGTTTTCTCGCGATCCAAAAGGCTCCGT
GCCCAAGTGAGTCCTTACCGCCTCCCTACCCAGCGGCTTCCCCTCCGCTAGTACGCATGTCCACAGCTTCACGGA
CCGGGAGAGAGGGGGCGCGGAAGGAAGGAGGCGGGACGGTATTACAAACAAAAAATACGGCCTTCTCGAGAAGC
GACGGCGGAGGGCCCCCTCCTCCCAGAAGGCGGTGCAGCCTGCCCGGGCGAGCCACGCACGCAGAGGGTTGTGGG
GCGGATAGCTCCCCCTCCAGATGGAGGCTCACGAAGTAGGGTGGGCGGGGGACTCCATATCCCAGCGTGCCCCGCG
GCGGGCCCTACCGGCCGCGACTCCGGGCTTGGCCCCGGCCCTAGCTCGTCGGCTGTGTATTGGGGCGCGTGGAGG
CTGCAGTCACGGTGGCGCCCCGCGGGACGGAGGAGGGAATGAGTGAAGAGGAGCAAGGCTCCGGCACTACCACGG
GCTGCGGGCTGCCTAGTATAGAGCAAATGCTGGCCGCCAACCAGGCAAGACCCCGATCAGCCTTCTGCAGGAGT
ATGGGACCAGAATAGGGAAGACGCCTGTGTACGACCTTCTCAAAGCCGAGGGCCAAGCCCACCAGCCTAATTTCA
CCTTCCGGGTACCGTTGGCGACACCAGCTGCACTGGTCAGGGCCCCAGCAAGAAGGCAGCCAAGCACAAAGGCAG
CTGAGGTGGCCCTCAAACACCTCAAAGGGGGGAGCATGCTGGAGCCGGCCCTGGAGGACAGCAGACTCTTCACTG
CCTGAGGACATTCCGGTTTTTACTGCTGCAGCAGCTGCTACCCAGTTCCATCTGTAGTCTTAACCAGGAGCCCC
CCCATGGAAGTGCAGCCCCCTGTCTCCCTCAGCAGTCTGAGTGCAACCCCGTTGGTGCTCTGCAGGAGCTGGTG
GTGCAGAAAGGCTGGCGGTTGCCGGAGTACACAGTGACCCAGGAGTCTGGGCCAGCCCACCGCAAAGAATTCACC
ATGACCTGTGAGTGAGCGTTTTATTGAGATTGGGAGTGGCACTTCCAAAAAATTGGCAAAGCGGAATGCGGCG
GCCAAAATGCTGCTTCGAGTGACACGGTGCCTCTGGATGCCCGGGATGGCAATGAGGTGGAGCCTGATGATGAC
CACTTCTCCATTGGTGTGGGCTCCCGCCTGGATGGTCTTCGAAACCGGGGCCAGGTTGCACCTGGGATTCTCTA
CGAAATTCAGTAGGAGAGAAGATCCTGTCCCTCCGCAGTTGCTCCCTGGGCTCCCTGGGTGCCCTGGGCCCTGCC
TGCTGCCGTGTCTCAGTGAGCTCTCTGAGGAGCAGGCCTTTCACGTCAGCTACCTGGATATTGAGGAGCTGAGC
CTGAGTGGACTCTGCCAGTGCCTGGTGGAAGTGTCCACCCAGCCGGCCACTGTGTGTCATGGCTCTGCAACCACC
AGGGAGGCAGCCCGTGGTGAGGCTGCCCCCGTGCCTGTCAGTACCTCAAGATCATGGCAGGCAGCAAGTGAAGC
CCCAGCTGGACTCATGGATGTGCACCCTTTGCTCCCTGCTCTTTCTGCCCTCTGGGCTCATGTATCTGCGCAGCTC
TGGTACCCTCTGTGGGTGCCATCTCTACCTCTGACACAGACTGCCTGCCTTGAAGCTGAGAAGGCACAGGGCAAG
GAGCCAAGGACCACAGAGCCTCAGCCAGCCCAGGATCCGTCCTCATTTTATTGGTGATGATGAATGGGAATGAAA
TCAGGGGGCTGTCTACTAGAGCCTGGAATAAATATGCTGCTTTGTGGATTTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 3619

MSEEEQSGSGTTTGCGLPSIEQMLAANPGKTPISLLQEYGTRIGKTPVYDLLKAEGQAHQPNFTFRVTIVGDTSCIG
QGPSKKAARKHKAEEVALKHLKGGSMLEPALEDSRLFTA

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FIGURE 3620

CTCGCGCCTGCAGTTTTTGGCTTTACCCCCAACCAAGTACCAAGACTTGACCACTCAAAGTCCAGCTCCCCAG
AACACTGCTCGACATGGACACCGGTGTGATTGAAGGTGGATTAAATGTCACTCTCACCATCCGGCTACTTATGCA
TGGAAGGAAGTTGGCAGTATCATCGGAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACG
TATCAACATCTCAGAAGGGAATTGTCTGAGAGAATTATCACTTTGGCTGGACCCACTAATGCCATCTTCAAAGC
CTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAATAGCACAGCTGCCAGTAGACC
CCCGGTACCCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTCATTGGAAAAGGTGGATGCAAGATCAA
GGAAATACGAGAGAGTACAGGGGCTCAGGTCCAGGTGGCAGGGGATATGCTACCCAACTCAACTGAGCGGGCCAT
CACTATTGCTGGCATTCCACAATCCATCATTGAGTGTGTCAAACAGATCTGCGTGGTCATGTTGGAGACTCTCTC
CCAGTCCCCCCCCGAAGGGCGTGACCATCCCGTACCGGCCCAAGCCGTCCAGCTCTCCGGTCATCTTTGCAGGTGG
TCAGGACAGGTACAGCACAGGCAGCGACAGTGCAGCTTTCCCCACACCACCCCGTCCATGTGCCTCAACCCTGA
CCTGGAGGGACCACCTCTAGAGGCCTATACCATTCAAGGACAGTATGCCATTCCACAGCCAGATTTGACCAAGCT
GCACCAGTTGGCAATGCAACAGTCTCATTTTCCCATGACGCATGGCAACACCGGATTTCAGTGGCATTGAATCCAG
CTCTCCAGAGGTGAAAGGCTATTGGGCAGGTTTGGATGCATCTGCTCAGACTACTTCTCATGAACCTACCATTC
AAACGATTTGATTGGCTGCATAATCGGGCGTCAAGGCGCCAAAATCAATGAGATCCGTCAGATGTCTGGGGCGCA
GATCAAAATTGCGAACCAGTGAAGGATCTACTGATAGGCAGGTACCATCACTGGATCTGCTGCCAGCATTAG
CCTGGCTCAATATCTAATCAATGTCAGGCTTTTCTCGGAGACGGGTGGCATGGGGAGCAGCTAGAACAAATGCAGA
TTCATCCATAATCCCTTTCTGCTGTTTACCACCACCCATGATCCATCTGTGTAGTTTCTGAACAGTCAGCGATT
CAGGTTTTAAATAGTTTGTAAATTTTTCAGTTTCTACACACTTTATCATCCACTCGTGATTTTTTAATTAAAGCGT
TTTAATTCCTTT

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FIGURE 3621

MDTGVIIEGGLNVTLTIRLLMHGKEVGSIIIGKKGESVKKMREESGARINISEGNCPERIITLAGPTNAIFKAFAMI
IDKLEEDISSSMTNSTAASRPPVTLRLVVPASQCGSLIGKGGCKIKEIRESTGAQVQVAGDMLPNSTERAITIAG
IPQSIIECVKQICVVMLETLSQSPPKGV TIPYRKPSSSPVIFAGGQDRYSTGSDSASFPHITPSMCLNPDLEGP
PLEAYTIQGQYAIQPDLTKLHQLAMQQSHFPMTHGNTGFSGISSSPEVKGYWAGLDASAQTTSHELTIPNDLI
GCIIGRQGAKINEIROMSGAIKIANPVEGSTDRQVTITGSAASISLAQYLINVRLSSETGGMGSS

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FIGURE 3622

CTCGCGCCTGCAGTTTTTGGCTTTCACCCCAACCCAGTGACCAAAGACTTGACCACTCAAAGTCCAGCTCCCCAG
AACACTGCTCGACATGGACACCGGTGTGATTGAAGGTGGATTAAATGTCACTCTCACCATCCGGCTACTTATGCA
TGGAAAGGAAGTTGGCAGTATCATCGGAAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACG
TATCAACATCTCAGAAGGGAATTGTCTGAGAGAATTATCACTTTGGCTGGACCCACTAATGCCATCTTCAAAGC
CTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAATAGCACAGCTGCCAGTAGACC
CCCGGTACCCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTCATTGGAAAAGGTGGATGCAAGATCAA
GGAAATACGAGAGAGTACAGGGGCTCAGGTCCAGGTGGCAGGGGATATGCTACCCAACTCAACTGAGCGGGCCAT
CACTATTGCTGGCATTCCACAATCCATCATTGAGTGTGTCAAACAGATCTGCGTGGTCATGTTGGAGTCCCCCCC
GAAGGGCGTGACCATCCCGTACCGGCCCAAGCCGTCCAGCTCTCCGGTCATCTTTGCAGGTGGTCAGGACAGGTA
CAGCACAGGCAGCGACAGTGCAGCTTTCCCCACACCACCCCGTCCATGTGCCTCAACCCTGACCTGGAGGGACC
ACCTCTAGAGGCCTATACCAATTCAAGGACAGTATGCCATTCCACAGCCAGATTTGACCAAGCTGCACCAGTTGGC
AATGCAACAGTCTCATTTCCTCATGACGCATGGCAACACCGGATTTCAGTGGCATTGAATCCAGCTCTCCAGAGGT
GAAAGGCTATTGGGCAGGTTTGGATGCATCTGCTCAGACTACTTCTCATGAACTCACCATTCCAAACGATTTGAT
TGGCTGCATAATCGGGCGTCAAGGCGCCAAAATCAATGAGATCCGTCAGATGTCTGGGGCGCAGATCAAAATTGC
GAACCCAGTGGAAGGATCTACTGATAGGCAGGTTACCATCACTGGATCTGCTGCCAGCATTAGCCTGGCTCAATA
TCTAATCAATGTCAGGCTTTCCTCGGAGACGGGTGGCATGGGGAGCAGCTTAGAACAATGCAGATTTCATCCATAAT
CCCTTTCTGCTGTTCCACCACCCCATGATCCATCTGTGTAGTTTCTGAACAGTCAGCGATTCCAGGTTTTAAAT
AGTTTGTAATTTTCAGTTTCTACACACTTTATCATCCACTCGTGATTTTTTAATTAAAGCGTTTTAATTCCTTT

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FIGURE 3623

MDTGVIIEGGLNVTLTIRLLMHGKEVGSIIIGKKGESVKKMREESGARINISEGNCPERIITLAGPTNAIFKAFAMI
IDKLEEDISSSMTNSTAASRPPVTLRLVVPASQCGSLIGKGGCKIKEIRESTGAQVQVAGDMLPNSTERAITIAG
IPQSIIECVKQICVVMLESPPKGV TIPYRKPSSSPVIFAGGQDRYSTGSDSASFPHHTPSMCLNPDLEGPPLEA
YTIQGQYAI PQPDLTKLHQLAMQQSHFPMTHGNTGFSGIESSSPEVKGYWAGLDASAQTTSHELTIPNDLIGCII
GRQGAKINEIRQMSGAIKIANPVEGSTDRQVTITGSAASISLAQYLINVRLSSETGGMGSS

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FIGURE 3624

AGAGCGACGCGGAACCCCGGGCGCCTGGGTCCCCAGCATGATCCTCGGCAGCCTGAGCCGGGCAGGGCCCCCTGCC
TCTGCTACGGCAGCCCCGATCATGCAGCCCCACTGGACCTCAAGCAGATCCTGCCCTTCCCACTCGAGCCAGC
CCCTACCCTTGGCCTCTTCAGCAACTACAGCACCATGGACCCCTGTGCAGAAGGCTGTGCTCTCCACACTTTTGG
GGGACCCCTTGCTCAAGACCAAGCGGCCCGTCATTTCTGTAAATATCTGTCAAATCCGCTTCAATTCTCAGAGCCA
GGCTGAGGCGCACTACAAAGGTAATCGCCACGCCCCGACGAGTCAAAGGCATTGAGGCTGCCAAGACCAGAGGCAG
GGAGCCTGGCGTCCGAGAACCTGGAGACCCAGCTCCCCCAGGCAGCACCCCAACAAATGGGGATGGTGTAGCACC
CCGTCCAGTTTCCATGGAGAATGGACTGGGGCCAGCCCCAGGATCCCCAGAGAAACAGCCTGGCTCCCCATCCCC
TCCCAGCATTCCGGAGACTGGTCAGGGTGTAAACCAAGGGTGAAGGGGGGACTCCAGCCCCGGCTTCTTTGCCTGG
GGGTAGCAAGGAAGAGGAGGAGGAGAAAACCAAGCGGTGCTCTACTGTGCTCTGTGCAAGGTGGCTGTGAACTCCCT
GTCCCAGCTTGAGGCACATAACAAAGGTACTAAGCACAAAGACAATTCTGGAGGCCCCAAGTGGGCTCGGGCCCCAT
CAAAGCTTACCCTCGGCTGGGGCCTCCACCCCCGGGGGAACAGAGGCTCCTGCCAGGACCGAACTTTCCACTG
TGAGATCTGCAATGTCAAGGTCAACTCGGAGGTCCAAGTGAACAGCACATCTCCAGCCGGCGGCACCGAGACGG
CGTGGCCGGGAAGCCCAACCCACTACTGAGCCGTACAAGAAGTCTAGGGGCGCCGGGGAGCTGGCGGGCACGCT
GACTTTCTCCAAGGAGCTGCCAAGTCCCTGGCGGGCGGCCTGCTCCCCAGCCCCCTGGCGGTGGCTGCAGTGAT
GGCAGCGGCAGCAGGCTCGCCGCTGTCCCTGCGCCCGGCTCCAGCCGCACCTCTTCTCCAGGGACCGCCGATCAC
TCACCTCTGCTTACCCGGCCCCCGGACCCATCCGAAGTGCACGACGACCCATCCTCTTCTCCCCGTACTGACC
TCAACCTGAACCCCTCCCATTTCAACTCCCCACCTCCAGCCGGGACCCAGGCGTCCGGGCTCCCAGCCCCGCCCT
CCTCCCGGCACTCCCTAAATGATCTCTCTTCCCCCCCCCACCCTGAGATACGGGGTTCCAGGAAAGGGGAGGG
GTAGCGGGGGAGGGGGGCTTCAGAAGGGGGGGAACACCCAGATCTCAGGGAACCCCGCCCCCTGCCTTTCCCTC
TCCCCTAGAAAAGGGGGGGCCGTCTACCCCCGAGCCCCCTTGAGACACCCCCCTCCCAAAGCCATGTCCAT
CCAGCCCTTCCCCCAAACCTAGCACAAAACGGGGTTACAAGCCATGGTCGGGGTCCGGGGGGGACAGAAATGG
ATTTTCTTGGAATAAGCGGACTCTGGGACTCCGGCTCCCTACCCCAAAGTGAAGCGCTTCCGTGAACACCCCCG
TCCTCCGTAGGGGGAGGGGAGCAGGCGGGATCCTGGGTCCCTCATAAGCACTTTGGTTTTACCGCCTGCAACCTC
ACTGTGCCCCCCCCGCACCATGCCCTAGCCCCAGGTCTAGCCGGGGCCATTGCAGGGGGCAGCACTTGGGGGCAT
CTCCGGCACTTGGGTGGGACCAAGGAGATGCCACCATAGACCTTTCCCTCGCCTTCTTCCCTAGTCCGGGTT
CCATTCTTTTACCAGCACCCATCGCCCAAGGGGTACCGAGGGGGGCAAGGGGTGTCCAGTCCAAGCCCACCCCC
GCCTCGCCTTCCGCAAACTGTGAGCAAAAAGCAATAGAAGCCTCGCCCCCGCCCTTCCCTTCGAGGATTGCG
CGAGTCTGTAGCCTCCCCGATCCAAGTTCCCTAGACCTCATGGCTGTCCCTCCACCACTCACCTCCACTGCACA
ACTCGGGCGGGGTGTGACACCTCTCCCCACCCCCGACTCCGTGGTTTCCGTATCGTCAACCTTCAGCCGCCG
ACCCGGGAGGGGTCTGGCCTACACTGGTCTTCCCTTCCCATCAACTCTTCTGCTTGACAATGTAGCAACCCAG
GCCCCCACCCACGGTCTCCCTTTTTCTCTCCCTGACAATAAAGTCTGAATTTGTTCTGCCCTCC

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FIGURE 3625

MQPPLDLKQILPFPLEPAPTLGLFSNYSTMDFVQKAVLSHTFGGPLLKTKRPVISCNICQIRFNSQSQAEEAHYKG
NRHARRVKGIEAAKTRGREPGVREPGDPAPPGSTPTNGDGVAPRPVSMENGLGPAPGSPEKQPGSPSPPSIPETG
QGVTKGEGGTPAPASLPGGSKEEEEKAKRLLYCALCKVAVNSLSQLEAHNKGTKHKKTILEARSGLGPIKAYPRLG
PPTPGEPEAPAQDRTFHCEICNVKVNSEVQLKQHISRRHRDGVAGKPNPLLSRHKKSRGAGELAGTLTFSKELP
KSLAGGLLPSP LAVAAVMAAAGSPLSLRPAPAAPLLQGPPITHPLLHPAPGP IRTAHGPILFSPY

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FIGURE 3626

AGTTACCCCAATGGACCTGCCTACTGCAGCGTAGGCCTCGCCTCAACGGCAGGAGAGCAGGCGGCTGCGGTTGCT
GCAGCCTTCAGTCTCCACCCGGACTACGCCATGTTGGGGTTTGTGGGTGCGGTGGCCGCTGCTCCGGCCTCCGGG
GCCTTGCGGAGACTCACCCCTTCAGCGTCGCTGCCCCAGCTCAGCTCTTACTGCGGGCCGCTCCGACGGCGGTC
CATCCTGTGAGGGACTATGCGGCGCAAACATCTCCTTCGCCAAAAGCAGGCGCCGCCACCGGGCGCATCGTGGCG
GTCATTGGCGCAGTGGTGGACGTCCAGTTGATGAGGGACTACCACCAATTCTAAATGCCCTGGAAGTGCAAGGC
AGGGAGACCAGACTGGTTTTGGAGGTGGCCAGCATTGGGTGAGAGCACAGTAAGGACTATTGCTATGGATGGT
ACAGAAGGCTTGTTAGAGGCCAGAAAGTACTGGATTCTGGTGCACCAATCAAAATTCCTGTTGGTCCTGAGACT
TTGGGCAGAAATCATGAATGTCATTGGAGAACCTATTGATGAAAGAGGTCCCATCAAAACCAAACAGTAAATTTGC
TCCCATTCATGCTGAGGCTCCAGAGTTCATGGAAATGAGTGTGAGCAGGAAATTCGTTGACTGGTATCAAGGT
TGTCGATCTGCTAGCTCCCTATGCCAAGGGTGGCAAAATTGGGCITTTTGGTGGTGCTGGAGTTGGCAAGACTGT
ACTGATCATGGAGTTAATCAACAATGTCGCCAAAGCCCATGGTGGTTACTCTGTGTTTGCTGGTGTGGTGAGAG
GACCCGTGAAGGCAATGATTTATACCATGAAATGATTGAATCTGGTGTATCAACTTAAAGATGCCACCTCTAA
GGTAGCGCTGGTATATGGTCAAATGAATGAACCACCTGGTGTCTGCTGCCGGGTAGCTCTGACTGGGCTGACTGT
GGCTGAATACTTCAGAGACCAAGAAGGTCAAGATGTACTGCTATTTATTGATAACATCTTTCGCTTCACCCAGGC
TGGTTCAGAGGTGTCTGCATTATTGGGCCGAATCCCTTCTGCTGTGGGCTATCAGCCTACCCTGGCCACTGACAT
GGGTACTATGCAGGAAAGAAATTACCACTACCAAGAAGGGATCTATCACCTCTGTACAGG

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FIGURE 3627

MYCYLLITSFASPRLVQRCLHYWAESLLLWAIPLPWPLTWVLCRKELPLPRDLSPYRLSMCLLMT

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FIGURE 3628

CTTGGTTCCGCGTTCCCTGCACAAAATGCCCGGCGAAGCCACAGAAACCGTCCCTGCTACAGAGCAGGAGTTGCC
GCAGCCCCAGGCTGAGACAGGGTCTGGAACAGAATCTGACAGTGATGAATCAGTACCAGAGCTTGAAGAACAGGA
TTCCACCCAGGCAACCACACAACAAGCCAGCTGGCGGCAGCAGCTGAAATTGATGAAGAACCAGTCAGTAAAGC
AAAACAGAGTCGGAGTGAAAAGAAGGCACGGAAGGCTATGTCCAAACTGGGTCTTCGGCAGGTTACAGGAGTTAC
TAGAGTCACCTATCCGGAATCTAAGAATACTCTTTGTCATCACAAAACCAGATGTCTACAAGAGCCCTGCTTC
AGATACTTACATAGTTTTTTGGGGAAGCCAAGATCGAAGATTTATCCCAGCAAGCACAACTAGCAGCTGCTGAGAA
ATTCAAAGTTCAAGGTGAAGCTGTCTCAAACATTCAAGAAAACACACAGACTCCAAGTGTACAAGAGGAGAGTGA
AGAGGAAGAGGTCGATGAAACAGGTGTAGAAGTTAAGGACATTGAATTGGTCATGTCACAAGCAAATGTGTCGAG
AGCAAAGGCAGTCCGAGCCCTGAAGAACAACAGTAATGATATTGTAAATGCGATTATGGAATTAACAATGTAACC
ATATGGAAGCAACTTTTTTTGGTGTCTCAAAGGAGTAACTCAGCTTGGTTTGAAATTTGTACTGTTTCTATCAT
AAATAAAGTTATGGCTTCTTGTGGAAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3629

MPGEATETVPATEQEELPQQAETGSGTESDSDESVPLEEEQDSTQATTQQAQLAAAAEIDEEPVSKAKQSRSEKK
ARKAMSKLGLRQVTGVTIRVTRVIRKSKNILFVITKPDVYKSPASDTYIVFGEAKIEDLSQQAQLAAAEKFKVQGEAV
SNIQENTQPTVQEESEEEVDETGVKDIELVMSQANVSRKAVRALKNNSNDIVNAIMELTM

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FIGURE 3630

CTGAGGGGTGTACATTTTATTGGAAACCTTAAATACTGTTTCAGAAAGAATATATCTTCAATCAAGGCTCTTGTGC
AGCCTACACAGAAAAATGAAGCTTTTTGGGTTAGGGGCAAGGAGAGAGACAGTACAGAGGACAAAGACCCCTCAC
GATGAATGCTCTTCAGCCAGCTTATCAGCTTTTGCCACAGCTTCTTCAATGGGTCCCACCATATAGAAGGCCTGT
TCTGGGAGATGGTCATATTCACCTGCCAAAATCTGCTGGAATCCTTTGATGGTCTCCTTCAGGGGTACCAGCTTC
CCCATATGACCTGTGAAGACCTCAGCAACCTGGAATGGCTGAGACAAGAAACGCTGTATTTCCGTGCACGGGACA
CGGTCAACTTGTCTTCCTCAGAAAGTTCATCCATACCCAGGATGGCAATGATATCTGGAAGGAATTTGTAGTCCT

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FIGURE 3631

CCTATTCTACGGCTGACCCCTGGTGGTCACGTGGATCTGTTTCGCCACGCAAGTCTGGGTCTTCGGCGATTGACC
GGGGTCCTTGCTGTTTCGGGAGCCTCTCCTAAGCTGCCTGTTTCGCGCGAGAGTTTGGAGGGGCGGGTTTGGGGTCG
GTGTCTGATTGGGGCTCGCACCCGCAGCACGCTGGAGTCCCGCTTAGGTACCAAGTTAGCGTCAGGGGAGCTGGGTG
AGGCGGTGCGCCGGGACACCCCGTGTGTGGCAGGCGGGCGAAGCGCTCTGGAGAATCCCGGACAGCCCTGCTCCCTG
CAGCCAGGTGTAGTTTCGGGAGCCACTGGGGCCAAAGTGAGAGTCCAGCGGTCTTCCAGCGCTTGGGGCCACGGCG
GCGGCCCTGGGAGCAGAGGTGGAGCGACCCCAATTACGCTAAAGATGAAAGGCTGGGGTTGGCTGGCCCTGCTTCT
GGGGGCCCTGCTGGGAACCGCCTGGGCTCGGAGGAGCCAGGATCTCCACTGTGGAGCATGCAGGGCTCTGGTGGA
TGAAGTAGAATGGGAAAATTGCCCAGGTGGACCCCAAGAAGACCATTAGATGGGATCTTTCGGATCAATCCAGA
TGGCAGCCAGTCAGTGGTGGAGGTGCCCTTATGCCCCGCTCAGAGGCCCACCTCACAGAGCTGCTGGAGGAGATATG
TGACCGGATGAAGGAGTATGGGGAACAGATTGATCCTTCCACCCATCGCAAGAACTACGTACGTGTAGTGGGCCG
GAATGGAGAATCCAGTGAAGTGGACCTACAAGGCATCCGAATCGACTCAGATATTAGCGGCACCCTCAAGTTTGC
GTGTGAGAGCAATTGTGGAGGAATACGAGGATGAACTCATTGAATTCTTTTCCGAGAGGCTGACAATGTTAAAGA
CAAACCTTTGCAGTAAGCGAACAGATCTTTGTGACCATGCCCTGCACATATCGCATGATGAGCTATGAAACCACTGG
AGCAGCCCACACTGGCTTGATGGATCACCCCAAGGAGGGGAAAATGGTGGCAATGCCTTTTATATATTATGTTTT
TACTGAAATTAAGTAAAAAATATGAAACC

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FIGURE 3632

MKGWGWLALLLGALLGTAWARRSQDLHCGACRALVDELEWEIAQVDPKKTIQMGSFRINPDGSQSVVEVPYARSE
AHLTELLEEICDRMKEYGEQIDPSTHRKNYVRVVGNGESSELDLQGIRIDSDISGTLKFACESIVEEYEDELIE
FFSREADNVKDKLCSKRTDLCDHALHISHDEL

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FIGURE 3633

GGCCTCATCATTTCTGTCTCCTGTTTCTCCACTTCCTTCTCTATTGGTTGGTCCACTGATGTATGGACTTGCACA
TGATGAACTGTGAACTTCTAGCCACATGTAGTGCCCTTGGGTACTTGGAGGGAGACACTTACCATAAGGAACCAG
ATTGCTTAGAGAGCGTGAAGGATCTGATCCGCTATTTGAGGCATGAGGATGAGACACGAGATGTGCGGCAGCAGC
TGGGGGCAGCCAGATCCTACAGAGCGACCTTCTGCCCATCCTCAGCCAGCACCACCAGGACAAGCCTCTCTTTG
ATGCTGTTATCCAGACTGATGGTGAACCTTGACACAACCAGCCTTGCTCTGTTTTGGCAATCTGCCTAAGGAGCCC
AGCTTTCGGCACCATTTTTTGAGGTGCTAACTTATTTGAGGCCTACAAAGAGGCCTTTGCCAGTGAGAAGGCT
TTTGGAGTCCTCAGTGAAACCTTGTATGAGCTGCTGCAGCTGGGCTGGGAGGAACGGCAGGAGGAAGACAACCTTG
CTGATTGAACGGATCCTACTGCTGGTCAGAAATATTCTCCATGTCCCAGCTGACCTTGATCAGGAGAAGAAGATT
GATGATGACGCCAGTGCCCATGACCAGCTCCTCTGGGCGATTACCTCAGCGGCCTGGATGACCTGCTCCTCTTT
CTGGCCAGCTCGTCTGCTGAGGAGCAATGGAGCCTACATGTGCTAGAGATTGTCTCCCTTATGTTTCGTGACCAG
AACCCCGAGCAGCTGGCGGGAGTAGGGCAGGGACGCTTAGCTCAGGAGCGGAGTGCAGATTTTGCAGAACTGGAG
GTATTGCGCCAGCGAGAGATGGCAGAAAAGAAGACTCGAGCCCTCCAGCGAGGCAACAGGCATTCTCGATTTGGG
GGCTCCTATATTGTCCAGGGGTTGAAATCCATTGGGGAGAGGGACCTCATCTTTCACAAAGGCCTTCACAACCTA
CGAAACTACAGTTCAGATTTGGGAAAGCAGCCGAAAAGGTGCCTAAACGTCGCCAGGCCGCCGAGAGCTGTCC
ATTCAGCGCCGTTCTGCCCTCAATGTGAGGCTCTTCTCAGAGACTTCTGCTCTGAGTTCTGGAGAAGCTGTTAC
AACCGGCTCATGGGATCAGTAAAGGATCACCTGCTTCGGGAGAAAGCTCAGCAGCATGATGAGACCTATTATATG
TGGGCCTTGGCTTTCTTCATGGCCTTCAACCGAGCTGCCTCCTTCCGGCCAGGCCTGGTTTTCTGAGACCCTCAGT
GTCCGTACCTTCCACTTCATTGAGCAGAACCTCACCACTACTATGAGATGATGCTGACTGACCGCAAGGAAGCT
GCCTCCTGGGCACGCCGGATGCACTTGGCTCTGAAGGCCTATCAGGAGCTGCTGGCAACAGTGAATGAGATGGAC
TTATCTCCAGATGAGGCTGTGAGGGAGAGCAGCCGCATCATCAAGAACAATATTTTCTATGTGATGGAGTACCGA
GAACTATTCTGGCACTTTTTTCGAAAGTTTGATGAGAGATGCCAGCCCCGCTCTTTCCTTCGTGACCTGGTGGAG
ACCACCCACCTCTTCCTCAAAATGTTGGAGCGATTCTGTGCGAGCCGTGGGAACCTGGTGGTGCAG

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FIGURE 3634

ATGGAGGTGACATCATGTGGACAACAGGCTAGGATGCCAGAGTTAGCTGCTCGGTGGAGATCATTGAGAATGCA
TCTTGTCTTGTTCTTGCAGCCCGGCATGCCAGTGCTTCCTCCACGAATTTGAAAGACATATTGGCTGACCTGATA
CCTAAGGAGCAGGCCAGAATTAAGACTTTCAGGCAGCAACATGGCAAGACGGTGGTGGGCCAAATCACTGTGGAC
ATGAAAAGTAAACTACACCTGACGCTGAGACTCAAAGTGTGCAAGAGTCCCAAGGACAAAGAGGAGGGCCTGAA
GGACCCACTCTTGTGCTCGGCGTGGTCACCGAAGGCTTAAATAATAGGCTTGGAGAAATGGAAACAGGCAGTTCG
GGAAGTGACAAGGCCCTTCCTACAAAGCAGAGGACGAAATTAGCCACTGCTCCAGAGTGA

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FIGURE 3635

GAGGACCCCGGGCTGGGCGCCGCCGCCGATCCCGGAGATCGCCCGCCATGGCTTTACTTTACTGCGGCCGCCCGGC
TCTTGGGAACCAAGAATGCATCTTGTCTTGTTCCTTGCCAGCCCGGCATGCCAGTGCTTCCTCCACGAATTTGAAAG
ACATATTGGCTGACCTGATACCTAAGGAGCAGGCCAGAATTAAGACTTTTCAGGCAGCAACATGGCAAGACGGTGG
TGGGCCAAATCACTGTGGACATGATGTATGGTGGCATGAGAGGCATGAAGGGATTGGTCTATGAAACATCAGTTC
TTGATCCTGATGAGGGCATCCGTTTCCGAGGCTTTAGTATCCCTGAATGCCAGAACTGCTACCCAAGGCTAAGG
GTGGGGAAGAACCCTGCCTGAGGGCTTATTTTGGCTGCTGGTAACITGGACATATCCCAACAGAGGAACAGGTAA
AGCAGAAGGATATTATTAGCTCTTCTCATTCCCCCTTCTTCATTGCCTTTCTCTAATCTCAGACACTTAATGCTGA
TCCGGCATTATATAGAGATGCGTAGTGAAGGGAAGGAATCAGCAGAGTTCTGCTGTATAAATGGATTGGGTTGACC
TCTCTTGGGTTTTCTTTACTCAGATGTTGCTGTCTTTTTTATTTTTTCTCCTTCCCTTGCTGCTGGTGTCTG
AGCACTGTCTCTTTTTCCACAGGTATCTTGGCTCTCAAAAGAGTGGGCAAAGAGGGCAGCTCTGCCTTCCCATGT
GGTCACCATGCTGGACAACCTTTCCACCAATCTACACCCCATGTCTCAGCTCAGTGCAGCTGTTACAGCCCTCAA
CAGTGAAAGTAACTTTGCCCGAGCATATGCACAGGGTATCAGCCGAACCAAGTACTGGGAGGTAGGAAATTTGGG
TGGGGTGATCGGTGTGTGATG

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FIGURE 3636

GCTAATGAATGAATGTGATCATTTAAAAGAAAGTCTCTTTCAGTATGAGAGAGAGAAAACAGAAGTAGTAGTGGT
TGTGAGACAACCTCAACAAGAAGTGGCTGACAGCGTAAAAAATTAACGACGTTAGAGTCTCCACTGGAAGGTAT
ATCATGTTGTACATTAATTTGGATGAGACACAGGCCTCAAATAAGAAATTATTTCAAGTGAAAAGTCAAATATA
AGAACTCCTGGAAATGACAATAAATATGTTAAATGTATTTGGAAATGAAGACTTTGATTGCCATGGAGACTTAA
AAACAGATCAACTGAAAATGGATATTCTGATTAAAGAAGCTAAAAACAGAAGTTTGATGATCTTACAGCACAGAAGG
AAGCTTTATCTTCAAAATGTGTCAATTTGGCTAAAGACAATCAAGTTCTTCAACAGGAGTTTTTATCTATGAAAA
AAGTACAACAGCAATGTGAAAAACTTGAGGAGGATAAAAAAGATGTTGAAAGAAGAAATATTAATCTTAAGACAC
ATATGGAAAAACAATAGGGTAGAAATTAGTAACTACAAGAATATAAATTGGAGCTAGATGAAAAGGCAATGCAGG
CAGTAGAAAAATTAGAAGAAATCCATTTACAGGAACAAGCACAATATGAAAAACAATTAGAGCAGTTAAACAAGG
ATAATATGGCTTCACTAAATAAAAAAGGAACCTCACACTTAAAGATGTGGAATGTAAATTCTCAGAAATGAAACTG
CTTATGAAGAGGTTACAACCGAATTAGAAGAATATAAGGAAGCCTTTGCAGCAGCATTGAAAGCTAACAATTCCA
TGTCAAAAAAGTTAACAATAAATAAGAAAATAGCAGTGATTAGCATGAAGCTCCTCATGGAGAAAGAGCAGA
TGAAATATTTTCTCAGTGCTCTTCTACAAGGCGAGACCCAGAGTCACCTTGTGTTGAAAATCTTACTAGTATAG
GACTCAACAGAAAAATATATTCCCCAAACACCCATAAGAATTCCTATTTCAAGCCCACAGACTTCAAATAACTGCA
AGAACTCCTAGACTGTGATGGAGCTGGACTGTGTAGAACAATAACTAGAGAAACAAAGAGAATTGTTGCTGTGT
TGAACACTTGCTCCCGTCTACTTACTTCTCTATAATCCACTGCCATGGAATGAGTGATTTTTCTTAGAAGCAGAG
GTGGAGCCACTGAGGAAGCACAGGCGAGCCCTCCCCAGCACGTGCTCACTGGTCCCCAACAGAACACCGCTGCC
GCATCCATGAGGCTCCCATTGTGGTGGGTGTGTCACCCCACAATGTCACCTGTTGCTGAGCCCCCATCGCCTCTG
TGTTGTGGAGCAGTTAGAGACACACTGTGGTGTCTGAGTGGCTCTGTGTGAAGGACCGTTTTCTAGGTGAGAGGC
ACATCTCAACACAGCTGACTGATCAGACTCAACCATTTTGCACACCCTGGTCAGAATGAAACATTCCTTGGGAAC
TCGGGCCGTGAGAAGCATCCTTCCTGATCACCTGACTGTAGAAACATCCTTATCGCACCCCTCCCGGGCAAAGGCC
CAACAGCCTGACTGCAGGAACATCCTTGCCATATCCTGCCGGGCAGCAAGCTCTACCGCCCACGCCCTCCTTCC
CAGTCCCATGATCACCCAGCCTGTGAGAGGCAGTTGGTGTGGCAGTAAGCTGGTTTCTCCTCTGCAGGGTTT
TGCTAGTAATAAAGGTGTTGCTGTTGAAGCCGTCAAAAAAAAAAAAAAAAAAGGCCAGCATCGAGTCGGCCTTGT
TGGATTCTGGGGCCCCGAGGTCGAGCCCGCCGCTGCCGCCGTGCGCTGAGGGAAGCGAGAAGAGGCCGCGACCCGA
GAGAAAAAGCGGAGTCGCCACCGGAGAGAAGTCGACTCCCTAGCAGCAGCCGCCGCCAGAGAGGCCCGCCACCA
GTTGCCCCGTCCCCCTGCCCGTTTCAATGCAGCCTGCTTCTGCAAAGTGGTACGATCGAAGGGACTATGTCTT
CATTGAATTTTGTGTTGAAGACAGTAAGGATGTTAATGTAAATTTTGAAAAATCCAACTTACATTAGTTGTCT
CGGAGGAAGTGATAATTTTAAGCATTAAATGAAATTGATCTTTTTCTACTGTATTGATCCAAATGATTCCAAGCA
TAAAAGAACGGACAGATCAATTTTATGTTGTTTACGAAAAGGAGAATCTGGCCAGTCATGGCCAAGGTTAACAAA
AGAAAGGGCAAAGCTTAATTGGCTTAGTGTGACTTCAATAATTGGAAAGACTGGGAAGATGATTAGATGAAGA
CATGTCTAATTTTGATCGTTTCTCTGAGATGATGAACAACATGGGTGGTGATGAGGATGTAGATTTACCAGAAGT
AGATGGAGCAGATGATGATTACAAGACAGTGATGATGAAAAAATGCCAGATCTGGAGTAAGGAATATTGTCTATC
ACCTGGATTTTGAGAAAGAAAAATAACTTCTCTGCAAGATTTTCAATAATTGAGAGAATTCCTGAGTTGATAGCTCT
AAAGGCAGATATGCTGTATTGCTTACTTTAACCCTTTTTCAACCTGTTTGTTTTTTAAAGGCTTCACTAAGG
GTTGATAIGTACCATTGTATGGGGCAATTTTAAGTCAGCTAAGGCAATAACCTTATGCATGAGCATTTCCAGAC
TTTCATGAAGCTGTTGAGGTCCTAGGCAATTAATGCAGCAGTTGCGATAAATAAAAAACATCTCACCTAAGTCTCC
TTTTCTTCATAACATAGATACTGACATGATAGGAAGCTCTCAGCTTAGGGAAAAGAGAATAAATTTTAGATTATAG
AACATGGATTCAAAAGTGACTGGAACAAATTGGCTGACACCTTACTGGTAACCTGCTATTCTTCTGGTGTTATCC
TTCAGGATTGTTCCACTAAATTTATTTTTCAAAAAATTTACTTCACATTATTCTATGTAAGTGATGACTTGTC
GTGTTCCAGGTGTATCTTAGCTAAACTAGAGAATGCCCTAACTTAGATGGTTTTTGAAGCCTATACAATTGGTA
TTGTTTGACCCTTAAGCTTTTACATCTCTTAGCATGGAGGACGAAGAAAGCTGTACATTGTTGCTTGAGAGTCTG
TACATTTAGTCCAGATTTGTATTGCACTGTGAGTATGGCAAAATGAGTGAAAAATGTTTAATACACTATTGGATT
TTTTATTTCTTTTTTTGATTACAGCTTATACCCGGGCTGAAAACCTCAATTTATGTTTCATGACAGTGGGGATTT
TTTAAATGTCTACATTCTTTCTAATAAACTGTTGGAAGACTT

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FIGURE 3637

MTINMLNVFGNEDFDCHGDLKTDQLKMDILIKKLKQKFDDLTAKQALSSKCVNLAKDNQVLQQEFLSMKKVQQQ
CEKLEEDKKMLKEEILNLKTHMENNRRVEISKLQEYKLELDEKAMQAVEKLEEIHLQEQAQYEQLEQLNKDNMAS
LNKKELTLKDVECKFSEMKTAYEEVTTLEEEYKEAFAAALKANNSSMSKKLTSSNKKIAVISMKLLMEKEQMKYFL
SALPTRRDPESPCVENLTSIGLNRKYIPQTPIRIPISSPQTSNNCKNS

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FIGURE 3638

GACGACCTGTCTCGCTGCGTGACGCCCCGCGCCGCCCGCAGAAATGCTTCGGTTACCCACAGTCTTTTCGCCA
GATGAGACTGGTGTCCAGGGTGCTGGCTCCTCATCTCACTGGGGCTTATGCCAAAGATGTAAAATTCGGTGCAGA
TGCCCCGAGCCTTAATGCTTCAAGGTATAGACCTTTTAGCCGATGCTGTAGCCCTTACAATGGGGCCAAAGGGAAG
AAGAACAGTGATTATCGAGCAGAGCTGGGGAAGTCCCAAAGTAACAAAAGATGGTGTGACTGTTGCAAAGTCAAT
TGACTTAAAGGATAAAATATAAAAACATTGGAGCTAAACTTGTTCAAGATGTTGCCAATAACACAAATGAAGAGAC
TGGGGATGGCCCTACCACTGCTACTGTACTGGCAGCTCTATAGCCAAGGAAGGCATCGAGAAGATTAGCAAAGG
TGCTAATCCAGTGGAATCAGGAGAGGTGTGATGTTAGTTGTTGATGCTGTAATTGCTGAACCTTAAAAAGCAGTC
TAAACCTGTGACCACCCCTGAAGAAATTGCACAGGTTGCTACAATTTCTGCAAACGGAGACAAAGAAATTGGCAA
TATCTCTGATGCAATGAAAAAGGTTGGAAGAAAGGGTGTCTACAGTAAAGGATGGAAAAACACTGAATGATGA
ATTAGAAATTATTGAAGGCATAAAGTTTGATCGAGGCTATATTTCTCCATACTTTATTAATACATCAAAAGGTCA
GAAATGTGAATTCCAGGATGCCTATGTTCTGTTGAGCGAAAAGAAAATTTCTAGTGTCCAGTCCGTTGTACCTGC
TCTTGAAATTGCCAATGCTCACCGTAAGCCTTTGGTCATAATCGCTGAAGACGTTGATGGAGAAGCTCTAAGTAC
ACTCGTCTTGAATAGGCTAAAGGTTGGTCTTCAGGATGTGGCAATCAAGGCTCCAGGGTTTGGTGACAATAGAAA
GAACCAGCTTAAAGATATGGCAATTGCTACTGGTGGTGCAGTGTGTTGGAGAAGAGGGGCTGACCCTAAATCTTGA
AGATGTTTCAGCCTCATGACTTAGGAAACGTTGGAGAGGTCATTGTGACCAAAGATGATGCCACGCTCTTAAAGA
AAAAGGTGACAAGGCTCAAATTGAAAAACGTATTCAAGAAATCATTGAGCAGTTAGATGTCACAACTAGTGAATA
TGAAAAGGAAAACTGAATGAACGGCTGGCAAACTTTTCAGATGTAGTAGCTGTGCTGAAGGTTGGTGGGACAAG
TGATGTTGAAGTGAATGAAAAGAAAGACAGAGTTCGGATGCCCTTAATGCTACAAGAGCTGCTGTTGAAGAAGGC
TTTGTATTGGGAGGGGGTTGTGCCCTGCTTCGATGCATTCTAGCCTTGGACTCATTGACTCCAGCTAATGAAGAT
CAAAAAATTGGTACAGAAATTATTAAAGAACTCAAAATTCAGCAATGACCATTGCTAAGAATGCAGGTGTTG
AAGGATCTTCGATAGTTGAGAAAATTACGCAATTTCCCTCAGAAGCTGGTTATGATGCTATGGTTGGAGATTTTG
TGAATATGGTGGAAAAATGAATTATTGACCAACAAAGGTTGTGAGAACTGCTTTATTGGATGCCGCTGGTGTGA
CCTCTCTGTTAACTACAGCAGAAGTTGTAGTCACAGAAATTCCTAAAGAAGAGAAGGACCCCTGGAATGGGTGCAA
TGGGTAGAATGGGAGGTGGTATGGGAAGTGGCATGTTCTAACTCCTAGACTAGTGCTTTACCTTTATTAATGAAC
TGTGACAGGAAGCCCAAGGCAGTGTTCCTACCAATAACTTCAGAGAAGTCAGTTGGAGAAAAATGAAGAAAAAG
GCTGGCTGAAAATCACTATAACCATCAGTTACTGGTTTCAGTTGACAAAATATATAATGGTTTACTGCTGTCATT
GTCCATGCCATAGATAATTTATTTTGTATTTTGAATAAAAAACATTTGTACATTCTGATACTGGGTAAAAGA
GCCATGTACCAATGTATGGCTTTCACTTAAATCACTGAGGCATTTTACTACTATTCTGTTAAATCAGGATTT
TTAGTGCTTGCCACCACCAGATGAGAAGTTAAGCAGCCTTTCTGTGGAGAGTGAGAATAATTGTGTACAAAGTAG
AGAAATATCCAATTATGTGACAACTTTTGTGTAATAAAAAATTTGTTTAAAGTT

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FIGURE 3639

MLRLPTVFRQMRLVSRVLAPHLTGAYAKDVKFGADARALMLQGIDLLADAVALTMGPKGRRTVIEQSWGSPKVT
KDGVTVAKSIDLKDKYKNIGAKLVQDVANNINEETGDGPTTATVLARSIAKEGIEKISKGANPVEIRRGVMLVVD
AVIAELKKQSKPVTTPEEIAQVATISANGDKEIGNISDAMKKVGRKGVITVKDGKTLNDELEIEGKIFDRGYIS
PYFINTSKGQKCEFQDAYVLLSEKKISSVQSVVPALEIANAHRKPLVIAEDVDGEALSTLVNLRLKVGLQDVAI
KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGNVGEVIVTKDDATLLKEKGDKAQIEKRIQEII
EQLDVTTSEYEKEKLNERLAKLSDVVAVLKVGGTSDVEVNEKKDRVRMPLMLQELLLKKALYWEGVVPCFADF

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FIGURE 3640

GTGCGGTGGTCAGGAACGAGGAGACTCCACTAAGTTCCTTGTGTTGCCTTCATTTTCATTCCCCCAACCCCAAT
GAATTTTAGCCAAATGGAGCGGAGTCCCTGAAAGATTTTGGCAGGAAGATCTGGAAGAAGAGGAAAACCTGCCT
GAGGAAGACAGCGAAGAGGAAGAAGAAGGGGGCTCAGAAGCAGAACAAGTCCAGGGTAGCTTAGTCCTTTCAAAT
GAAAACCTTGGTCAAAGCCTGCATCAGGAAGGCTTTTCTATCCCGCTCCTATGGCTCCAGAAGTGCCTGATCCGA
GCAGCTGATGATCGGGAAGAGGATGGCTGCTCCAGGCCGTTCCATTGGTGCCACTCACAGAGGAAAATGAGGAA
GCCATGGAACGAACAGTTTCAGCAGCTGTTGCGCAAGCTAGGGGTTTCGGCCCCCTGCCTCTGGGCAGGAAACC
TTCTGGCGAATTCCAGCCAAGCTGAGTCCTACCCAGCTCCGGAGGGCAGCAGCTTCTTTGAGTCAACCAGAGGAG
GAACAGAAGCTGCAGCCAGAGCTGCAGCCTAAAGTCCCTGGAGAGCAAGGCTCTGATGAGGAGCACTGTAAAGAG
CACCGAGCACAAGCCCTGAGGGCCCTCTTGCTAGCCCAAGAAGAAAGCGGGCCTGGCATCCCCAGAGGAGGAA
GACGCTGTTGGTAAAGAGCCGCTGAAGGCAGCACCCAAGAAACGACAATTGCTGGACAGCGACGAGGAACAGGAA
GAAGATGAGGGCAGGAACAGAGCACCAGAGTTGGGAGCTCCAGGAATCCAAAAGAAGAAACGATACCAGATTGAG
GATGATGAGGATGACTGAAGAGCTAAGAAGCCTAGGGGTAGAGATAGACACGTTTTTAGATGGTGCATTCAAGTC
AGAGTTGGAAGGGTCATACAGGACCCAGAAGCTCCTCTTACTGGACAGAGCAGTAGAATCCAGGCTCTTTACAG
GATTTAGGCTGAGAACTTCAGCAGCAGTATTGGACTTCTCTGCTGTCTAGTCTTTGTTTCTCCAGTTTTATCG
GTATGCCCCAGCAGCTCTCTGGAGATTTAGTTCTTCTTCTAGGAACCATTTCTTTTGGTTATTGGAGCTCCTT
AGCAAATAAGAGGAGTGAGTGAAATAGAGAAAGCACCCCGGACCCCTTTTATTGGTCTGTTCCCTTGGCTTTCTC
TTGGAGGTGGGTGCGCAGCACCAGATGGGGAGCTTTATGACATGACAGGCGGGAGTTTTGTACCACTTTTAGAAGA
TACCAGATGCCTCTGTCTCATTTTGTTCCTATGATCATCCTCTAGATACCAGATAGAGGCCCATTCCTGCATT
TGAGATAGGGTTGGAATATAGTACTCTAGATGATGAATGTGTTTGCTTTGTGTTGGTATTAAACATGTAAGATT
AGAAGTTCTCATCTCAGTCTGACTTGGCGATATGTCTAAGTTCCCCAGCCCTTCCCCTGCTGTGCTCTTGAAAGA
AGAAGTTAACAATTTTAGGGTAAAAAGAGACCAACAGACCGGCACAGTGGCTCAAACCTGTTGTCTTAGCACTTT
GGGAGGCTGAGGCGGGCGGATCACCTGAGGTCAGGAGTTTGAGACCGGCCTGGACAATATGGCGAAATCCCATCT
CCACTAAAAATACAAAAATTAGCCGGCCATGGTGGCATGCGCCTGTAATCCCAGCCACTCGGGTGGCTGAGGCAG
GAGAATTGCCTGAACCCAGGAGGCAGAGGTTGCAGTGAGCTAAGGTCACGCCAGTGCATATGCCTGGGCGACAGA
GCAAGACTCTGTCTCAAAAAAAAAAGAAAAAAAAAAGACCAACAACCTTCCCTTTTCTTCCGCTTTCCCTACAG
AAGACACAGAAAAGCATTTTGCCTCTAGATCCTTTTGTCTAGGGTAAATTCTTAGGGTGACAAGAGTATGCGGC
AGGAAGAAGGAGGAGCCATAAAGGAAGAGAAGCCAGCTTGTGGCATGGGGCATAGAAAAGGACAAAATCTAGGC
ATGAAAAGGATGGATAAATACTGCAATATTATGTTCTTACCCATTCTTGAAACGTCAGCTTTCTTGCTTCCTG
TGCTTCCAGCCGAGGTAGGGCAAAGGTGAGATTGAGAAAATAGCCATTCAGCTCAGGAAGGCTTCTAAGTAAAGG
ATGGATTTGGA

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FIGURE 3641

AGTTGATTTATGAAGACTCTATGGATCTAATCGCAAAGCTACCTTGTGTTGCAGCAAAGATCTACCGAAATCTCT
ACAGAGAAGGCAGCGGTATTGGGGCCATTGACTCTAACCTGGACTGGTCTCACAATTCACCAACATGTTAGGCT
ATACTGATCATCAGTTCAGTCTCAGCTCACGCGCCTGTACCTCACCATCCACAGTGACCATGAGGGTGGCAATGTAA
GTGCCCATAACCAGCCATTTGGTGGGCAGTGCCCTTCCGACCCCTACCTGTCCTTTGCAGCAGCCATGAACGGGC
TGGCAGGGCCTCTCCATGGACTGGCAAATCAGGAAGTGCTTGTCTGGCTAACACAGCTGCAGAAGGAAGTTGGCA
AAGATGTGTGAGATGAGAAGTTACGAGACTACATCTGGAACACACTCAACTCAGGACGGGTTGTTCCAGGCTATG
GCCATGCAGTACTAAGGAAGACTGATCCGCGATATACCTGTCAGCGAGAGTTTGCTCTGAAACACCTGCCTAATG
ACCCCATGTTTAAGTTGGTTGCTCAGCTGTACAAGATTGTGCCCAATGTCCTCTTAGAGCAGGGTAAAGCCAAGA
ATCCTTGGCCCAATGTAGATGCTCACAGTGGGGTGCTGCTCCAGTATTATGGCATGACGGAGATGAATTACTACA
CGGTCCTGTTTGGGGTGTACGAGCATTGGGTGTACTGGCACAGCTCATCTGGAGCCGAGCCTTAGGCTTCCCTC
TAGAAAGGCCCAAGTCCATGAGCACAGAGGGTCTGATGAAGTTTGTGGACTCTAAGTCAGGGTAA

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FIGURE 3642

AAAGCTTGTTTGGACGACCTTCGTCTGGGATGCACTCTTCTCTCCTTCACCTACAAATGATAGAGGATTACGAA
GAACATACGGTTGGCTCCTCTTTCCTTTGGCCTTAGGTTTCTGACCTCCTGCAGCCTCCTCTTGCCTCGGGCTG
CCCAGATCTTGGCGGCTGAGGCTGGCTTACCTTCGAGCCGTTTCCTTCATGGGATTGCTGCTCCCTTCACCAACA
AGCGAAAGGCTTACTCGGAGCGTAGAATCATGGGGTACTCAATGCAGGAGATGTATGAGGTGGTGCCAAACGTCC
AGGAGTATCGTGAGTTTGTGCCCTGGTGTAAGAAGTCTCTGGTGGTATCCAGCCGTAAGGGTCATTTGAAAGCCC
AGCTGGAGGTTGGCTTTCCACCTGTCTATGGAACGTTACACCTCTGCAGTTTCCATGGTCAAACCTCACATGGTCA
AGGCTGTTTGTACTGATGGCAAGCTCTTCAACCACTTAGAGACTATTTGGCGATTTCAGCCCTGGTATTCCTGCCT
ATCCTCGAACCTGCACTGTGGACTTTTCGATTTCCTTTGAATTCGTTCTCTGCTGCACTCCCAGCTGGCCACCA
TGTTTTTTTGATGAGGTTGTCAAACAGAATGTTGCTGCCTTTGAGCGTCGGGCAGCCACCAAGTTTGGTCCAGAAA
CAGCCATCCCCCGTGAACCTGATGTTCCATGAGGTGCACCAGACTTGAGGCAAGGGATTGCTCCCTGACCTCCCTT
CTACCCCACTTCCCTACACAATTCTCTTATTTATTTGGTTTGGCTCCTGTTCCAATTTGAAAGGAGTCTGTGTTT
ATAATACTGTTTCTCCTCTCAATTTCCAGAAATTGGGTTCTATGCTGGCTGGAAATGTTGGGGGAAAGAGAAGG
CAAAGGATGTGGAAATGAGATGTGCTTAGGAAAGGGTCAGGCCCATCGTAGGAGCACCATATGCCTGCAGCCTTT
TCACTACGAATTAGAATAAGGACTATGTGGTTGTCTCTGGACCTTATCAAGACACCTTAGTGTCTGACCAGGGGA
CGATAGTAACTTTTCTAAGGATTGAATAAATTGAGCTTTTCTTCTGGCACAGAGGTACTGAGTGGTAAGTAACTT
TTACCCTGCCTGAGATTCTTCAGGAGAAAAGGCAACCTGCCTCCAGCCTGAAATACATAAAGCCTCATTTTAAGA
CTGTAAGTCCATGCTGCCTGGCTACTAGAGAGCAAGGGGCTTTCTTACCACCAGTGCTGAGGAGAAAAGTACTGA
ACGGAAACGGAGTTGTCTTTGTACTCTTGAGTTGTACCTTATTCTTCCACTTGGCCTGAGTTTTTATAAAATTC
AATAAATTGTGACAGTGTG

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FIGURE 3643

GGCACGAGGAGGGGTTGAGGCTGCCTGACCCAGCCTAATGGGGTAGGTAGGCCTTGGGAAGTGGAGCATGGGGG
CAAAGGATCCAAGCATTGAGCCTTCATCCTCTATTCCCCATCCAGTGGGGTGCCGAGGCTCAGGCAGCATGACGA
CGGAGACCTTTGTGAAGGATATCAAGCCTGGGCTCAAGAATCTGAACCTTATCTTCATTGTGCTGGAGACAGGCC
GAGTGACCAAGACAAAGGACGGGCATGAGGTTTCGGACCTGCAAAGTGGCGGACAAAACAGGCAGCATCAATATCT
CTGTCTGGGACGATGTTGGCAATCTGATCCAGCCTGGGGACATTATCCGGCTCACCAAAGGGTACGCTTCAGTTT
TCAAAGGTTGTCTGACACTATATACTGGCCGTGGGGGTGATCTGCAGAAGATTGGAGAATTCTGTATGGTTTATT
CTGAGGTTCCCTAACTTCAGTGAGCCAAACCCAGAGTACAGCACCCAGCAGGCACCCAAACAAGGCGGTGCAGAACG
ACAGCAACCCCTTCAGCTTCCCAGCCTACCACTGGACCCTCTGCTGCCTCTCCAGCCTCTGAGAACCAGAATGGGA
ATGGACTGAGTGCCCCACCAGGTCCCGGTGGTGGCCCACATCCCCCTCATACTCCCTCCCCACCCACCCAGCACCC
GAATCACTCGAAGCCAGCCCAACCACACACCTGCAGGCCCGCCTGGCCCTTCCAGCAACCCTGTTAGTAACGGCA
AAGAAACCCGGAGGAGCAGCAAGAGATAGCATGACATTCTTTCTTCCTGCCACCAACCACATCCCAAGTGTCCCC
TGGAGAGCAAGATAGCCTTCCACTGATTGGCTGGTGTAGCAGTATTTAGCCACTGAACTTCAGTGGAGGGTGGT
GAGCAGTGTCTTATCCACCCTAATCTCATACTCCCTCATTGTCCAGCTGAACTACCTGTCCCTGGGAGTCAGG
ACCCTCTGCCTGCTCTCTTTCTCTTTAGAAATGGCAGTTACTGGCTGGGCGCAGTGGCTCACGCTTGTAATCCC
AGCACTTTGGGAAGCCGAGGTGGGCGGATCACCTGAGGTCGGGAGTTCAAGACCAGCCTGACCAACATGGAGAAA
CCCCGTGTCTACTAAAAATACAGAATTAGCCAGGCATGGTGGCGTATGCCGTGAATCCCAGCTACTTAGGAGGCT
GAGGCAGGAGAATCTCTTGAACCGGGAGGCGGAGGTTGAGGTGAGCCGAAATTGCACCATTGCACTCCAGCCTG
GGCAATAAGAGCGAACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3644

MTTETFVKDIKPGLKNLNLIFIVLETGRVTKTKDGHEVRTCKVADKTGSINISVWDDVGNLIQPGDIIRLTGYA
SVFKGCLTLYTGRGGDLQKIGEFCEMVYSEVPNFSEPNPEYSTQQAPNKAVQNSNPSASQPTTGPSAASPASENQ
NGNGLSAPPGGGGPHPPHTPSHPPSTRITRSQPNHTPAGPPGPSSNPFVSNGKETRRSSKR

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FIGURE 3645A

GGCGGGCGGGCGGGCGGGGCCCCGAGCCGGAGAAGATGGCGGTGCGGAAGAAGGACGGCGGGCCCCAACGTGAAGTACT
ACGAGGCCGCGGACACCGTGACCCAGTTCGACAACGTGCGGCTGTGGCTCGGCAAGAACTACAAGAAGTATATAC
AAGCTGAACCAACCAACAAGTCCCTGTCTAGCCTGGTTGTACAGTTGCTACAATTTTCAGGAAGAAGTTTTTG
GCAAACATGTGAGCAATGCACCGCTCACTAACTGCCGATCAAATGTTTCTAGATTTCAAAGCGGGAGGCTCCT
TGTGCCACATTCTTGAGCTGCTTACAAATTCAGAGTGACCAGGGATGGCGCGTTACGATTTCCAGAATCCAT
CACGCATGGACCGCAATGTGGAAATGTTTATGACCATTGAGAAGTCCTTGGTGCGAGAATAATTGCTGTCTCGAC
CTAACATTTTTCTGTGCCAGAAATTGAGCCCAACTACTAGGGAAATTAAGGACATTATCAAGAGACACCAGG
GAACAGTCACTGAGGATAAGAACAATGCCTCCCATGTTGTGTATCCTGTCCCGGGAATCTAGAAGAAGAGGAAT
GGGTACGACCAGTCATGAAGAGGGATAAGCAGGTTCTTCTGCACTGGGGCTACTATCCTGACAGTTACGACACGT
GGATCCCAGCGAGTGAAATTGAGGCATCTGTGGAAGATGCTCCAACCTCCTGAGAAACCTAGGAAGGTTTCATGCAA
AGTGGATCCTGGACACCGACACCTTCAATGAATGGATGAATGAGGAAGACTATGAAGTAAATGATGACAAAAACC
CTGTCTCCCGCCGAAAGAAGATTTTCAGCCAAGACACTGACAGATGAGGTGAACAGCCAGATTTCAGATCGACGGG
ACAAGAAGGGGGGAAACTATAAGAAGAGGAAGCGCTCCCCCTCTCCTTACCAACCCCCAGAAGCAAAGAAGAAAA
ATGCTAAGAAAGGTCCCTCAACACCTTACACTAAGTCAAAGCGTGGCCACAGAGAAGAGGAGCAAGAAGACCTGA
CAAAGGACATGGACGAGCCCTCACCAGTCCCCAATGTAGAAGAGGTGACACTTCCCAAAACAGTCAACACAAAGA
AAGACTCAGAGTCGGCCCCAGTCAAAGCGGCGACCATGACCGACCTGGATGAACAGGAAGATGAAAGCATGGAGA
CGACGGGCAAGGATGAGGATGAGAACAGTACGGGGAACAAGGGAGAGCAGACCAAGAATCCAGACCTGCATGAGG
ACAATGTGACTGAACAGACCCACCACATCATCTCCAGCTACGCTGCCGTGGTTTGACTACAATAGTGTTCATG
CCATTGAGCGGAGGGCTCTCCCCGAGTTCTTCAACGGCAAGAACAAGTCCAAGACTCCAGAGATCTACCTGGCCT
ATCGAAACTTTATGATTGACACTTACCGACTGAACCCCAAGAGTATCTTACCTTACCGCTGCCGCCGAAACC
TAGCGGGTGATGTCTGTGCCATCATGAGGGTCCATGCCTTCCTAGAACAGTGGGGTCTTATTAACCTACCAGGTGG
ATGCTGAGAGTCGACCAACCCCAATGGGGCTCCGCCTACCTCTCACTTCCATGTCTTGGCTGACACACCATCAG
GGCTGGTGCCTCTGCAGCCCAAGACACCTCAGGGCCGCCAGGTTGATGCTGATACCAAGGCTGGGCGAAAGGGCA
AAGAGCTGGATGACCTGGTGCCAGAGACGGCTAAGGGCAAGCCAGAGCTGCAGACCTCTGCTTCCCAACAAATGC
TCAACTTTCTGACAAAGGCAAGAGAAACCAACAGACATGCAAACTTTGGGCTGCGCACAGACATGTACACAA
AAAAGAATGTTCCCTCCAAGAGCAAGGCTGCAGCCAGTGCCACTCGTGTAGTGACAGAACAGGAAACCCTGCTTC
TCCTGGAGGCACTGGAATGTACAAAGATGACTGGAACAAAGTGTCCGAGCATGTGGGAAGCCGACACAGGACG
AGTGCATCTTGCAATTTCTTCTGCTCTTCCATTGAAGACCCATACCTGGAGGACTCAGAGGCCTCCCTAGGCCCC
TGGCCTACCAACCCATCCCTTCAGTCAGTCGGGCAACCTGTTATGAGCACTGTTGCCTTCTTGGCCTCTGTCTG
TCGATCCCCGAGTCGCCTCTGCTGCTGCAAGTCAGCCCTAGAGGAGTTCTCCAAATGAAGGAAGGATACCCA
CGGCCTTGGTGGAGGCCCATGTTGCAAAAGTGGAAGAAGCAGCCAAAGTAACAGGCAAGGCGGACCTGCGCTTCG
GTCTGGAAGCAGTGGCATTGCAGGAACACCTCTGATGAGCCTGAGCGGATTGAGGAGAGCGGGAATGACGAGG
CTCGGGTGGAAGGCCAGGCCACAGATGAGAAGAAGGAGCCAAAGGAACCCCGAGAAGGAGGGGGTGCTATAGAGG
AGGAAGCAAAAGAGAAACCAGCGAGGCTCCCAAGAAGGATGAGGAGAAAGGGAAGGAAGGCGACAGTGAGAAGG
AGTCCGAGAAGAGTGATGGAGACCCAATAGTCGATCCTGAGAAGGAGAAGGAGCCAAAGGAAGGCGAGGAGGAAG
TGCTGAAGGAAGTGGTGGAGTCTGAGGGGGAAGGAAGACAAAGGTGGAGCGGGACATTGGCGAGGGCAACCTCT
CCACCGCTGCTGCCGCCGCCCTGGCCGCCGCCGAGTGAAAGCTAAGCACTTGGCTGCTGTTGAGGAAAGGAAGA
TCAAATCTTTGGTGGCCCTGCTGGTGGAGACCCAGATGAAAAAGTTGGAGATCAAATTCGGCACTTTGAGGAGC
TGGAGACTATCATGGACCGGAGCGAGAAGCACTGGAGTATCAGAGGCAGCAGCTCCTGGCCGACAGACAAGCCT
TCCACATGGAGCAGCTGAAGTATGCGGAGATGAGGGCTCGGCAGCAGCACTTCCAACAGATGCACCAACAGCAGC
AGCAGCCACCACAGCCTGCCCCAGGCTCCAGCCTATCCCCCAACAGGGGCTGCTGGGCCACCCGAGTCC
ATGGCTTGGCTGTGGCTCCAGCCTCTGTAGTCCCTGCTCCTGCTGGCAGTGGGGCCCCCTCCAGGAAGTTTGGGCC
CTTCTGAACAGATTGGGCAGGCAGGGTCAACTGCAGGGCCACAGCAGCAGCAACCAGCTGGAGCCCCCAGCCTG
GGGAGTCCACACAGGGGTTCCCCCCCCCTGGACCCATGGCCCCCTCACCGTTCCCCAACCAACAACTCCTCCCT
CAATGATGCCAGGGGAGTGCCAGGCAGCGGGCACCCAGGCGTGGCGGACCCAGGCACCCCCCTGCCCTCCAGACC
CCACAGCCCCGAGCCAGGCACGGTCAACCCCTGTGCCACCTCCACAGTGAGGAGCCAGCCAGACATCTCTCCCC
TCACCCCTGTGGACATCACGGTTCAGGAACAGCCCTTCCCCACCCTGGGACCCCTCCCGAGCTGGAGAGTT
CATCACTACGTAAGGAAAGCTCCTTCCGCCCTCCAAAGCCCTCACCATGCCTAACAGAGGCATGCATTTTTATA

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FIGURE 3645B

TCAGATTATTCAAGGACTTCTGTTTAAAAGATGTTTATAATGTCTGGGAGAGAGGATAGGATGGGAATGCTGCCC
TAAAGGAAGGGCTGGTGAAAGGTGTTTATACAAGGTCTATTAACCACTTCTAAGGGTACACCTCCCTCCAACT
ACTGCATTTTCTATGGATTAAAAAAGTAGATTTTAAAAAGCCACATTGGAGCTCCCTTCTACCC
ACTAAAAATAACCAATTTTACATTTTGTAGGGGGAGTGAGTTTGGGAAAGGGGAATTAAGATTCCAGGGAG
AGCTCTGGGGATAGAACAGGGCGCAGATTCCATCTCTCCCAAGCCCCTTTTAGTGACTAAGTCAAGGCCCCAA
CTCCCTCCCCACCCTACGCTGAGCTTATTCGAGTTCATTCTGTAATAATCCCTCCTGCGGCTTCCTCATTG
TTGCTGTTTTAGGCCACCCAGCTCAGCCAATGATTCCCTTCCCTCTGAATGTCAGTTTTGTTTTTAAAGTCAC
TTGCTTAGTTGATGTCAGCGTATGTGTATTTGGTGGGGAAAACCTAATTCGGGGATTCTGTGGTAGGTAATAG
GAGAAGAAAGGGCACTGGGGGCTGTTCTCCTTCCCTGCGGCTGTATCCATGGACTCCTGGAAGGCACAGAGA
AGGGAGCTATAAGAGGATGTGAAGTTTTAAACCTGAAATTGTTTTTAAAGCACTTAAGCACCTCCATATTATG
ACTTGGTGGGTCAACCTTAGCTTCCCTCCTCTCCACCAAGACTATGAGAACTTCAGCTGATAGCTGGGGGCTC
CCCAGATGAGGATGCAGGGATTTGGGAGCAGTGAAGAGGGTGCCCAACCTTGGGTGGACCAACCCTTGGCTCG
CAGCTCAACTCTGCTTCCCGCATTCTGCTCCACGTGTCCAGCTTCTCCCTGTGACGGGAAGGCAGGTGTGAC
TCCAGGCTCTGCACTGGTTCTTCTTGGTTCTTCCACCAGGCCCTTGTTCCTCATGTCCCATGTTTCTCTCCC
TCTGCGTCTTAGCACCTTCTTCTGTTCAAAGTTTTCTGTAAATTTCTCTTTTTTCTTTCTTTTCTTTT
TTTTTATAAATTAATTTGCTTTCAGTTCCATCTTGTGGGTGCATTCTGTGTTCTTACCTGTGGCTGTCAGGCAGG
GGGATTGTGATGGGAG

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FIGURE 3646

ATTACTGCAGGAAAAGGTCCCGGAGAGCTGAGCAGTCAAGATGTGTGACTTCACCGAAGACCAGACCGCAGAGTT
CAAGGAGGCCTTCCAGCTGTTTGACCGAACAGGTGATGGCAAGATCCTGTACAGCCAGTGTGGGGATGTGATGAG
GGCCCTGGGCCAGAACCCTACCAACGCCGAGGTGCTCAAGGTCTGGGGAACCCCAAGAGTGATGAGATGAATGT
GAAGGTGCTGGACTTTGAGCACTTTCTGCCCATGCTGCAGACAGTGGCCAAGAACAAGGACCAGGGCACCTATGA
GGATTATGTCGAAGGACTTCGGGTGTTTGACAAGGAAGGAAATGGCACCGTCATGGGTGCTGAAATCCGGCATGT
TCTTGTCACACTGGGTGAGAAGATGACAGAGGAAGAAGTAGAGATGCTGGTGGCAGGGCATGAGGACAGCAATGG
TTGTATCAACTATGAAGCGTTTGTGAGGCATATCCTGTCTGGGGTTGACCGGGCCCATGGGGCGGAGCTCGTCCGCAT
GGTGCTGAATGGCTGAGGACCTTCCCAGTCTCCCCAGAGTCCGTGCCCTTCCCTGTGTGAATTTTGTATCTAGCC
TAAAGTTTCCCTAGGCTTTCTTGCTCAGCAACTTTCCCATCTTGCTCTCTTGGATGATGTTTGCCGTCAGCAT
TCACCAAATAAACTTGCTCTCTGGGCCTC

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FIGURE 3647

MCDFTEDQTAEFKEAFQLFDRTGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDEMNVKVLDFEHFLPMLQ
TVAKNKDQGTIEDYVEGLRVFDKEGNGTVMGAEIRHVLVTLGEKMTTEEEVEMLVAGHEDSNGCINYEAFVRHILS
G

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FIGURE 3648

GGAAAAGGTCCCGGAGAGCTGAGCAGTCAAGATGTGTGACTTCACCGAAGACCAGACCGCAGAGTTCAAGGAGGC
CTTCAGCTGTTTGACCGAACAGGTGATGGCAAGATCCTGTACAGCCAGTGTGGGGATGTGATCAGGGGCCCTGGG
CCAGAACCCTACCAACGCCGAGGTGCTCAAGGTCCTGGGGAACCCCAAGAGTGATGAGATGAATGTGAAGGTGCT
GGACTTTGAGCACTTTCTGCCCATGCTGCAGACAGTGGCCAAGAACAAGGACCAGGGCACCTATGAGGATTATGT
CGAAGGACTTCGGGTGTTTGACAAGGAAGGAAATGGCACCGTCATGGGTGCTGAAATCCGGCATGTTCTTGTCAC
ACTGGGTGAGAAGATGACAGAGGAAGAAGTAGAGATGCTGGTGGCAGGGCATGAGGACAGCAATGTTTGTATCAA
CTATGAAGAGCTCGTCCGCATGGTGCTGAATGGCTTGAGGACCTTCCCAGTCTCCCCAGAGTCCGTGCCTTTCCCT
GTGTGAATTTTGTATCTAGCCTAAAGTTTCCCTAGGCTTTCTTGCTCTCAGCAACTTTCCCATCTTGCTCTCTCTTG
GATGATGTTTGCCGTCAGCATTACCAAATAAACTTGCTCTCTGGGAAAAA

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FIGURE 3649

MRALGQNPTNAEVLKVLGNPKSDEMNVKVLDFEHFLPMLQTVAKNKDQGTYESDYVEGLRVFDKEGNGTVMGAEIR
HVLVTLGEKMTTEEVEMLVAGHEDSNGCINYEELVRMVLNG

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FIGURE 3650

ATTACTGCAGGAAAAGGTCCCGGAGAGCTGAGCAGTCAAGATGTGTGACTTCACCGAAGACCAGACCGCAGATCT
GATCCCAAGCACTGAGTTCAAGGAGGCCTTCCAGCTGTTTGACCGAACAGGTGATGGCAAGATCCTGTACAGCCA
GTGTGGGGATGTGATGAGGGCCCTGGGCCAGAACCCTACCAACGCCGAGGTGCTCAAGGTCTGGGGAACCCAA
GAGTGATGAGATGAATGTGAAGGTGCTGGACTTTGAGCACTTTCTGCCCATGCTGCAGACAGTGGCCAAGAACA
GGACCAGGGCACCTATGAGGATTATGTCGAAGGACTTCGGGTGTTTGACAAGGAAGGAAATGGCACCGTCATGGG
TGCTGAAATCCGGCATGTTCTTGTCACTGGGTGAGAAGATGACAGAGGAAGAAGTAGAGATGCTGGTGGCAGG
GCATGAGGACAGCAATGGTTGTATCAACTATGAAGCGTTTGTGAGGCATATCCTGTCGGGGTGAACGGGCCCCATGG
GGCGAGCTCGTCCGCATGGTGCTGAATGGCTGAGGACCTTCCCAGTCTCCCCAGAGTCCGTGCCTTTCCCTGTGT
GAATTTTGTATCTAGCCTAAAGTTTCCCTAGGCTTTCTTGTCTCAGCAACTTTCCCATCTTGTCTCTCTTGGATG
ATGTTTGCCGTCAGCATTACCAAATAAACTTGCTCTCTGCG

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FIGURE 3651

MCDFTEdQTADLIPSTEFKEAFQLFDRTGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDEMNVKVLDFEH
FLPMLQTVAKNKDQGTyEDYVEGLRVFDKEGNGTVMGAEIRHVLVTLGEKMTEEEVEMLVAGHEDSNGCINYEAF
VRHILSG

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FIGURE 3652

CCCTCGAGAGCGGCTAGAGTCTGGCGGCCGAGAGGACTAGTTGTCCCAGCGTGCCCTGCGCCTCAGCCCCGCGCGC
TCGCAGCTTCTCGCTCTCGCCTGCCTGCCCCGCTCCCTTGCTTGCTCGCGCTTTTCGCTCGCCCTCTCCTCGAGGAT
CGAGGGGACTCTGACCACAGCCTGTGGCTGGGAAGGGAGACAGAGGCGGCGGCGGCTCAGGGGAAACGAGGCTGC
AGTGGTGGTAGTAGGAAGATGTCGGGCGAGGACGAGCAACAGGAGCAAACCTATCGCTGAGGACCTGGTCGTGACC
AAGTATAAGATGGGGGGCGACATCGCCAACAGGGTACTTCGGTCCTTGTTGGAAGCATCTAGCTCAGGTGTGTCTG
GTACTGAGCCTGTGTGAGAAAGGTGATGCCATGATTATGGAAGAAACAGGGAAAATCTTCAAGAAAGAAAAGGAA
ATGAAGAAAGGTATTGCTTTTCCCACCAGCATTTTCGGTAAATAACTGTGTATGTCACTTCTCCCTTTGAAGAGC
GACCAGGATTATATTCTCAAGGAAGGTGACTTGGTAAAAATTGACCTTGGGGTCCATGTGGATGGCTTCATCGCT
AATGTAGCTCACACTTTTGTGGTTGATGTAGCTCAGGGGACCCAAGTAACAGGGAGGAAAGCAGATGTTATTAAG
GCAGCTCACCTTTGTGCTGAAGCTGCCCTACGCCTGGTCAAACCTGGAAATCAGAACACACAAGTGACAGAAGCC
TGGAAACAAAGTTGCCCACTCATTTAACTGCACGCCAATAGAAGGTATGCTGTACACCAGTTGAAGCAGCATGTC
ATCGATGGAGAAAAAACCATTATCCAGAATCCCACAGACCAGCAGAAGTAGGTGCCAACCCCTACTTATTACCTTC
TACCACACAAGACTAGTCATCAGGTTTTTTTTCTATACTCCCAACTGAATCTTGTCCGCCCTCTACTCCATGTTTT
CAGGAGTGACCTGTTGCTCTTAATATTCCCTTTCTCTAGGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCAC
TTTGGGAGGCTGAGGCGGGTGGATCACCTGAGGTCACGAGTTCAGAACAGCCTAACCAACATGGCGAAACCCTG
TCTCTACTAAAAACTACAAAAATGAGCCAGGCCTGGTGGTTTGTGCCTATAGTCCCAGCTACTTGGGAGGCTGAG
GCAGGAGAGTTGCTTGGACCCGGGAGGTGGAGGTTGCAGTGAGCTGAGATTGTGCCACTGCACTCCAGCCTGGGT
GACAGAATGAGACTCTGTGTGCAAGGACCATGAAAAAGCTGAATTTGAGGTACATGAAGTATATGCTGTGGATGT
TCTCGTCAGCTCAGGAGAGGGCAAGGTGAGGAGAGTACCAGAGTTGGCAAAGAGGGGTGACTGAGAGTGTTACCC
AGACCAAATGTTACTTAAATTACTCTTTCAGGCCAAGGATGCAGGACAGAGAACCCTATTTACAAACGAGACCC
CTCTAAACAGTATGG

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FIGURE 3653

MSGEDQQEQTIAEDLVVTKYKMGGDIANRVLRLSLVEASSSGVSVLSLCEKGDAMIMEETGKIFKKEKEMKKGIA
FPTSISVNNCVCHFSP LKSDQDYILKEGDLVKIDLGVHVDGFIANVAHTFVVDVAQGTQVTGRKADVIKAAHLCA
EAALRLVKPGNQNTQVTEAWN KVAHSFNCTPIEGMLSHQLKQHVIDGEKTI IQNPTDQQK

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FIGURE 3654

ACCCGGCGCTCCATTAAATAGCCGTAGACGGAACTTCGCCTTTCTCTCGGCCTTAGCGCCATTTTTTTGGAAACC
TCTGCGCCATGAGAGCCAAGTGGAGGAAGAAGCGAATGCGCAGGCTGAAGCGCAAAAGAAGAAAGATGAGGCAGA
GGTCCAAGTAAACCGCTAGCTTGTTGCACCGTGGAGGCCACAGGAGCAGAAACATGGAATGCCAGACGCTGGGGA
TGCTGGTACAAGTTGTGGGACTGCATGCTACTGTCTAGAGCTTGCTCTCAATGGATCTAGAACTTCATCGCCCTCT
GATCGCCGATCACCTCTGAGACCCACCTTGCTCATAAACAAAATGCCCATGTTGGTCCTCTGCCCTGGACCTGTG
ACATTCTGGACTATTTCTGTGTTTATTGTGGCCGAGTGTAACAACCATATAATAAATCACCTCTTCGCTGTTT
TAGCTGAAGAATTAAATCAAAAAAAAAA

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FIGURE 3655

MRAKWRKKRMRLKRKRRKMRQSK

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FIGURE 3656

CCTGTCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCA
CGTGCAGCCTATTTCGCTGCACTAACTGTGCCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAATTCGTCATTTCG
AAACATAGTGGAGGCCGCGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCT
GTATGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCG
CAAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGG
AGCTGAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTTAAAAAAAAA
AAAAAAAAA

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FIGURE 3657

MTKKRRNNGRAKKGRGHVQPIRCTNCARCVPKDKAIKKFVIRNIVEAAVDRDISEASVFDAYVLPKLYVKLHYCV
SCAIHSKVVRNRSREARKDRTPPPRFRPAGAAPRPPPKPM

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FIGURE 3658

CCCCATCCCTTCCCCGGCTCCCCCGGTGTCCGCCATGGCCAAAGCCTACGACCACCTCTTCAAGTTGCTGCTGAT
CGGGGACTCGGGGGTGGGCAAGACTTGTCTGATCATTTCGCTTTGCAGAGGACAACCTTCAACAACACTTACATCTC
CACCATCGGAATTGATTTCAAGATCCGCACTGTGGATATAGAGGGGAAGAAGATCAAACCTACAAGTCTGGGACAC
AGCTGGCCAAGAGCGGTTCAAGACAATACTACTGCCTACTACCGTGGAGCCATGGGCATTATCCTAGCATACGA
CATCACGGATGAGAAATCTTTTCGAGAATATTCAGAACTGGATGAAAAGCATCATGGAGAATGCCTCAGCTGGGGT
GGAGCACCTCTTGCTAGGGAACAAATGTGACATGGAGGCCAAGAGGAAGGTGCAGAAGGAGCAGGCCGATAAGTT
GGCTCGAGAGCATGGAATCCGATTTTTTCGAACTAGTGCTAAATCCAGTATGAATGTGGATGAGGCTTTTAGTTC
CCTGGCCCGGGACATCTTGCTCAAGTCAGGAGGCCGGAGATCAGGAAACGGCAACAAGCCTCCCAGTACTGACCT
GAAAACCTTGTGACATAAAGAACACCAACAAGTGCTCCCTGAGCTGAGGACCCTTTCTTGCTCCCCACCCCGGAA
GCTGAACCTGAGGGAGACAACAGCAGAGGGAGTGAGCAGGGGAGAAATAGCAGAGGGGCTTGGAGGGACACATAG
GTAGATGGTAAAGAGAATGAGGAGAAAAAGGAGAAAAGGGAAAAAGCAGAAAGGAAAAAGGAAAAAGAGAGGAAG
GGAGAAGGGAGAGGAATGAATTGAGGAAGTGAACGAAGGCAAGGAGGTAGGAAGAGAGGGAGGAGGAAAGGAAGG
AGAGATGCCTCAGGCTTCAGACCTTACCTGGGTTTTTCAGGGCAAACATAAATGTAAATACACTGATTTATTCTGT
TACTAGATCAGGTTTTAGGGTCCTGCAAAGGGCTAGCTCGGCACTACACTAGGGAATTTGCTCCTGTTCTGTCAC
TTGTCAATGGTCTTTCTTGGTATTAAAGGCCACCATTTCACAAAAAATAAATAAA

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FIGURE 3659

GGAAGCAGGGGCGGGGCCTCTGGTGGCGGTGCGGAACCTCGGTGGGAGGCGGCAACATTGTTTCAAGTTGGCCAAA
TTGACAAGAGCGAGAGGTATACTGCGTTCATCCCGACCCGGGGCCACGGTACTGGGCCCTGTTTCCCCCTCCTC
GGCCCCCGAGAGCCAGGGTCCGCCTTCTGCAGGGTTCAGGCCCCCGCTCCAGGGCCGGGCTGACCCGACTCGC
TGGCGCTTCATGGAGAACTTCCAAAAGGTGGAAGATCGGAGAGGGCACGTACGGAGTTGTGTACAAAGCCAGA
AACAAAGTTGACGGGAGAGGTGGTGGCGCTTAAGAAAATCCGCCTGGACACGTGAAGTGAAGGTGTGCCAGTACT
GCCATCCGAGAGATCTCTGCTTAAGGAGCTTAACCATCTTAATATTGTCAAGCTGCTGGATGTCATTACACA
GAAAATAAACTCTACCTGGTTTTTGAATTTCTGCACCAAGATCTCAAGAAATTCATGGATGCCTCTGCTCTCACT
GGCATTCTCTTCCCCTCATCAAGAGCTATCTGTTCCAGCTGCTCCAGGGCCTAGCTTTCTGCCATTCTCATCGG
GTCCTCCACCGAGACCTTAAACCTCAGAATCTGCTTATTAACACAGAGGGGGCCATCAAGCTAGCAGACTTTGGA
CTAGCCAGAGCTTTTGGAGTCCCTGTTCTGACTTACACCCATGAGGTGGTGACCCGTGGTACCGAGCTCCTGAA
ATCCTCCTGGGCTGCAAATATTATTCCACAGCTGTGGACATCTGGAGCCTGGGCTGCATCTTTGCTGAGATGGTG
ACTCGCCGGGCCCTATTCCCTGGAGATTCTGAGATTGACCAGCTCTTCCGGATCTTTCGGACTCTGGGGACCCCA
GATGAGGTGGTGTGGCCAGGAGTTACTTCTATGCTGATTACAAGCCAAGTTTCCCCAAGTGGGCCCCGGCAAGAT
TTTAGTAAAGTTGTACCTCCCCTGGATGAAGATGGACGGAGCTTGTTATCGCAAATGCTGCACTACGACCCTAAC
AAGCGGATTTTCGGCCAAGGCAGCCCTGGCTCACCCTTTCTTCCAGGATGTGACCAAGCCAGTACCCCATCTTCGA
CTCTGATAGCCTTCTTGAAGCCCCCAGCCCTAATCTCACCCTCTCCTCCAGTGTGGGCTTGACCAGGCTTGGCCT
TGGGCTATTTGGACTCAGGTGGGCCCTCTGAACCTTGCCCTTAAACACTCACCTTCTAGTCTTGCCAGCCAACTCT
GGGAATACAGGGGTGAAAGGGGGGAACCAAGTGAAGTGAAGGAAGTTTCAGTATTAGATGCACTTAAGTTAGCC
TCCACCACCCTTTCCCCCTTCTCTTAGTTATTGCTGAAGAGGGTTGGTATAAAAAATAATTTTAAAAAGCCTTCC
TACACGTTAGATTTGCCGTACCAATCTCTGAATGCCCCATAATTATTATTTCAGTGTGTTGGGATGACCAGGATC
CCAAGCCTCCTGCTGCCACAATGTTTATAAAGGCCAAATGATAGCGGGGGCTAAGTTGGTGCTTTTGAGAACCAA
GTAAAAACAAACCCTGGGAGGAGTCTATTTTAAAGAATTCGGTTGAAAAATAGATCCAATCAGTTTATACCCCT
AGTTAGTGTTTTGCTCACCTAATAGGCTGGGAGACTGAAGACTCAGCCCGGGTGGGCTGCAGAAAAATGATTG
GCCCCAGTCCCCTTGTTTGTCCCTTCTACAGGCATGAGGAATCTGGGAGGCCCTGAGACAGGGATTGTGCTTCAT
TCCAATCTATTGCTTACCCTATGAGGCAGGTGAGAGATGTTTGAATTTTCTCTTCTTTTAGTATTC
TTAGTTGTTTCAAGGATCCCTGATCCCATTTTCTCTGACGTCCACCTCCTACCCCATAGGAGTTAGAA
GTTAGGGTTTAGGCATCATTTTGAAGATGCTGACATTTTTCAGGGCTGTGATTGAGTGAGGGCATGGGTAAAAA
TATTTCTTTTAAAGAAGGATGAACAATTATTTATATTTTTCAGGTTATATCCAATAGTAGAGTTGGCTTTTTTTT
TTTTTTTTTGGTCATAGTGGGTGGATTTGTTGCCATGTGCACCTTGGGGTTTTGTAAATGACAGTGCTAAAAAAA
AAAGCATTTTTTTTTTATGATTTGTCTCTGTACCCCTTGCTTGGAGTGCTCTTGCTATTAAAGTTATTTGTAAT
TTAGTTTGTAGCTCATTAAAAAATGTGCCTAGTTTTATA

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FIGURE 3660

ATGGATCTGGTGCTAAAAAGATGCCTTCTTCATTTGGCTGTGATAGGTGCTTTGCTGGCTGTGGGGGCTACAAA
GTACCCAGAAACCAGGACTGGCTTGGTGTCTCAAGGCAACTCAGAACCAAAGCCTGGAACAGGCAGCTGTATCCA
GAGTGGACAGAAGCCCAGAGACTTGACTGCTGGAGAGGTGGTCAAGTGTCCCTCAAGGTCAGTAATGATGGGCCT
ACACTGATTGGTGCAAAATGCCTCCTTCTCTATTGCCTTGAACCTCCCTGGAAGCCAAAAGGTATTGCCAGATGGG
CAGGTTATCTGGGTCAACAATACCATCATCAATGGGAGCCAGGTGTGGGGAGGACAGCCAGTGTATCCCCAGGAA
ACTGACGATGCCTGCATCTTCCCTGATGGTGGACCTTGCCCATCTGGCTCTTGGTCTCAGAAGAGAAGCTTTGTT
TATGTCTGGAAGACCTGGGGCCAATACTGGCAAGTTCTAGGGGGCCCAGTGTCTGGGCTGAGCA'TTGGGACAGGC
AGGGCAATGCTGGGCACACACACCATGGAAGTGACTGTCTACCATCGCCGGGGATCCCGGAGCTATGTGCCTCTT
GCTCATTCCAGCTCAGCCTTACCATTACTGACCAGGTGCCTTTCTCCGTGAGCGTGTCCCAGTTGCGGGCCTTG
GATGGAGGGAACAAGCACTTCCCTGAGAAATCAGCCTCTGACCTTTGCCCTCCAGCTCCATGACCCAGTGGCTAT
CTGGCTGAAGCTGACCTCTCCTACACCTGGGACTTTGGAGACAGTAGTGGAACCCCTGATCTCTCGGGCACTTGTG
GTCACCTACACTTACCTGGAGCCTGGCCCAGTCACTGCCCAGGTGGTCTCAGGCTGCCATTCTCTCACCTCC
TGTGGCTCCTCCCCAGTTCCAGGCACACAGATGGGCACAGGCCAACTGCAGAGGCCCTAACACCACAGCTGGC
CAAGTGCCTACTACAGAAGTTGTGGGTACTACACCTGGTCAGGCGCCAACTGCAGAGCCCTCTGGAACCACATCT
GTGCAGGTGCCAACCACTGAAGTCATAAGCACTGCACCTGTGCAGATGCCAACTGCAGAGAGCACAGGTATGACA
CCTGAGAAGGTGCCAGTTTCAGAGGTGATGGGTACCACACTGGCAGAGATGTCAACTCCAGAGGCTACAGGTATG
ACACCTGCAGAGGTATCAATTGTGGTGCTTTCTGGAACCACAGCTGCACAGGTAACAACCTACAGAGTGGGTGGAG
ACCACAGCTAGAGAGCTACCTATCCCTGAGCCTGAAGGTCCAGATGCCAGCTCAATCATGTCTACGGAAGTATT
ACAGGTTCCCTGGGCCCCCTGCTGGATGGTACAGCCACCTTAAGGCTGGTGAAGAGACAAGTCCCCCTGGATTGT
GTTCTGTATCGATATGGTTCCCTTTCCGTCAACCTGGACATTGTCCAGGGTATTGAAAGTGCCGAGATCCTGCAG
GCTGTGCCGTCCGGTGAGGGGGATGCATTTGAGCTGACTGTGTCTGCCAAGGCGGGCTGCCAAGGAAGCCTGC
ATGGAGATCTCATCGCCAGGGTGCCAGCCCCCTGCCAGCGGCTGTGCCAGCCTGTGCTACCCAGCCCAGCCTGC
CAGCTGGTTCTGCACCAGATACTGAAGGTGGCTCGGGGACATACTGCCTCAATGTGTCTCTGGCTGATACCAAC
AGCCTGGCAGTGGTCAGCACCCAGCTTATCATGCCTGGTCAAGAAGCAGGCCTTGGGCAGGTTCCGCTGATCGTG
GGCATCTTGCTGGTGTGATGGCTGTGGTCTTGATCTCTGATATATAGGCGCAGACTTATGAAGCAAGACTTC
TCCGTACCCAGTTGCCACATAGCAGCAGTCACTGGCTGCGTCTACCCCGCATCTTCTGCTCTTGTCCCATTGGT
GAGAATAGCCCCCTCCTCAGTGGGCAGCAGGTCTGA

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FIGURE 3661

MDLV LKRC LLHLAVIGALLAVGATKVPRNQDWLGVSRLRTKAWNRLYPWTEAQR LDCWRGGQVSLKVSNDGP
TLIGANASF SIALNFP GSQKVLPDGQVIWVNNTIINGSQVWGGQPVYPQETDDACIFPDGGPCPSGSWSQKRSFV
YVWKTWGQYQVVLGGPVSGLSIGTGRAMLGHTMEVTVYHRRGSR SYVPLAHSSSAFTITDQVPFSVSVSQLRAL
DGGNKHFLRNQPLTFALQLHDP SGYLA EADLSYTWDFGDSSGTLISRALVVTHTYLEPGPVTAQVVLQAAIPLTS
CGSSPVPGTTDGHRTAEAPNTTAGQVPTTEVVGTTPGQAPTAEPSGTTSVQVPTTEVISTAPVQMPTAESTGMT
PEKVPVSEVMGTTLAEMSTPEATGMTPAEVSIVVLSGTTAAQVTTTEWVETTARELPIPEPEGPDASSIMSTESI
TGSLGPLLDGTATLRLVKRQVPLDCVLYRYGSFSVTLDIVQGI ESAEILQAVPSGEGDAFELTVSCQGGLPKEAC
MEISSPGCQPPAQR LCPVLPSPACQLVLHQILKGGSGTYCLNVSLADTNSLAVVSTQLIMPGQEAGLGQVPLIV
GILLVLM AVVLASLIYRRRLMKQDFSVPLPHSSSHWLRLPRIFCSCPIGENSPLLSGQQV

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FIGURE 3662

GGCAGCAGAGAAGAAAGTGGTGAAAATTACATCTGAAATACCACAGACTGAGAGAATGCAGAAGAGGGCTGAACG
ATTCAATGTACCTGTGAGCTTGGAGAGTAAGAAAGCTGCTCGGGCAGCTAGGTTTGGGATTTCTTCAGTTCCAAC
AAAAGGTCTGTCATCTGATAACAAACCTATGGTTAACTTGGATAAGCTGAAGGAAAGAGCTCAAAGATTTGGTTT
GAATGTCTCTTCAATCTCCAGAAAGTCTGAAGATGATGAGAAACTGAAAAAGAGGAAGGAGCGATTTGGGATTGT
CACAAGTTCAGCTGGAAGTGAACCACAGAGGATACAGAGGCAAGAAGAGGAAAAGAGCAGAGCGCTTTGGGAT
TGCCTGATGAAAAGTTCCTGATACTTTCTGTTCTCCAGTGTTTTCCATTTCTCTCCTTCTTCTTGGTCACATATA
TGCCTAAATGCACAGTCATGTGCCTACGTCCGCTCGCAATGAGGGAGCATGTACCCAGGTACATCCATGAAC
TGCAGCAGCAGTTTGACTTATTGCTGTTTCAGCTTTAAGGTTGTTGTGTTTTGTTTTGATTATGTTGCTTGTT
AATAAAAAAAAAATAGAAAAG

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FIGURE 3663

GGCACGAGGGGCCGGGGGGCGCAGCTAGAGAGCCCCGGAGCCGCGGGGAGAGGAACGCGCAGCCAGCCTTGGG
AAGCCCAGGCCCGGCAGCCATGGCGGTGGAAGGAGGAATGAAATGTGTGAAGTTCTTGCTCTACGTCTCCTGCT
GGCCTTTTGCGCCGTGTCAGTGGGACTGATTGCCGTGGGTGTCGGGGCACAGCTTGTCCTGAGTCAGACCATAAT
CCAGGGGGCTACCCCTGGCTCTCTGTGTCAGTGGTCATCATCGCAGTGGGTGCTTCCTCTTCCTGGTGGCTTT
TGTGGGCTGCTGCGGGGCTGCAAGGAGAACTATTGTCTTATGATCACGTTTGCCATCTTTCTGTCTCTTATCAT
GTTGGTGGAGGTGGCCGAGCCATTGCTGGCTATGTGTTTAGAGATAAGGTGATGTCAGAGTTTAATAACAACCTT
CCGGCAGCAGATGGAGAATTACCCGAAAAACAACCACACTGCTTCGATCCTGGACAGGATGCAGGCAGATTTTAA
GTGCTGTGGGGCTGCTAACTACACAGATTGGGAGAAAATCCCTTCCATGTGGAAGAACCGAGTCCCCGACTCCTG
CTGCATTAAATGTTACTGTGGGCTGTGGGATTAAATTTCAACGAGAAGGCGATCCATAAGGAGGGCTGTGTGGAGAA
GATTGGGGGCTGGCTGAGGAAAAATGTGCTGGTGGTAGCTGCAGCAGCCCTTGGAATTGCTTTTGTGAGGTTTT
GGGAATTGTCTTTGCCTGCTGCCTCGTGAAGAGTATCAGAAGTGGCTACGAGGTGATGTAGGGGTCTGGTCTCCT
CAGCCTCCTCATCTGGGGGAGTGGAAATAGTATCCTCCAGGTTTTTCAATTAAACGGATTATTTTTTCAGACCGAA
AAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3664

MAVEGGMKCVKFLLYVLLLAFCACAVGLIAVGVGALVLSQTIIQGATPGSLLPVVIIAVGVFLFLVAFVGCCGA
CKENYCLMITFAIFLSLIMLVEVAAAAGYVFRDKVMSEFNNNFRQQMENYPKNNHTASILDRMQADFKCCGAAN
YTDWEKIPSMKSNRVPDSCCINVTVGCGINFNEKAHKEGCVKEKIGGWLRKNVLVAAAAALGIAFVEVLGIVFAC
CLVKSIRSGYEV

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FIGURE 3665

GGCACGAGGAGCTGTGAGGGTCAAGCACAGCTATCCATCAGATGATCTACTTTTCAGCCTTCCTGAGTCCCAGACA
ATAGAAGACAGGTGGCTGTACCCCTTGGCCAAGGGTAGGTGTGGCAGTGGTGTCTGCTGTCTACTGTGCCCTCATTG
GCCCCAGCAATCAGACTCAACAGACGGAGCAACTGCCATCCGAGGCTCCTGAACCAGGGGCCATTACCAGGAGC
ATGCGGCTCCCTGATGTCCAGCTCTGGCTGGTGTCTGCTGTGGGCACTGGTGCGAGCACAGGGGACAGGGTCTGTG
TGTCCCTCCTGTGGGGGCTCCAACTGGCACCCCAAGCAGAACGAGCTCTGGTGCTGGAGCTAGCCAAGCAGCAA
ATCCTGGATGGGTGACCTGACCAGTCGTCCCAGAATAACTCATCCTCCACCCCAGGCAGCGCTGACCAGAGCC
CTCCGGAGACTACAGCCAGGGAGTGTGGCTCCAGGGAATGGGGAGGAGGTATCAGCTTTGCTACTGTACAGAC
TCCACTTCAGCCTACAGCTCCCTGCTCACTTTTCACCTGTCCACTCCTCGGTCCCACCACCTGTACCATGCCCGC
CTGTGGCTGCACGTGCTCCCCACCCTTCCTGGCACTCTTTGCTTGAGGATCTTCCGATGGGGACCAAGGAGGAGG
CGCCAAGGGTCCCGCACTCTCCTGGCTGAGCACCACATACCAACCTGGGCTGGCATACTTAACTCTGCCCTCT
AGTGGCTTGAGGGGTGAGAACTGTGGTGTCTGAACTGCAACTAGACTGCAGACCCCTAGAAGGCAACAGCACA
GTTACTGGACAACCGAGGCGGCTCTTGACACAGCAGGACACCAGCAGCCCTTCCTAGAGCTTAAGATCCGAGCC
AATGAGCCTGGAGCAGGCCGGGCCAGGAGGAGGACCCACCTGTGAGCCTGCGACCCCTTATGTTGAGGCGA
GACCATTACGTAGACTTCCAGGAAGTGGGATGGCGGACTGGATACTGCAGCCCGAGGGGTACCAGCTGAATTAC
TGCAGTGGGCAGTGCCCTCCCCACCTGGCTGGCAGCCAGGCATTGCTGCCCTCTTTCCATTCTGCCGTCTTCAGC
CTCCTCAAAGCCAACAATCCTTGGCCTGCCAGTACCTCCTGTTGTGTCCCTACTGCCCGAAGGCCCTCTCTCTC
CTCTACCTGGATCATAATGGCAATGTGGTCAAGACGGATGTGCCAGATATGGTGGTGGAGGCCTGTGGCTGCAGC
TAGCAAGAGGACCTGGGGCTTTGGAGTGAAGAGACCAAGATGAAGTTTCCAGGCACAGGGCATCTGTGACTGGA
GGCATCAGATTCTGTATCCACACCCCAACCAACAACCACTGGCAATATGACTCACTTGACCCCTATGGGACCC
AAATGGGCACCTTCTTGTCTGAGACTCTGGCTTATTCAGGTTGGCTGATGTGTTGGGAGATGGGTAAAGCGTTT
CTTCTAAAGGGGTCTACCCAGAAAGCATGATTTCTGCCCTAAGTCCTGTGAGAAGATGTCAGGGACTAGGGAGG
GAGGGAGGGAAGGCAGAGAAAAATTACTTAGCCTCTCCAAGATGAGAAAGTCCTCAAGTGAGGGGAGGAGGAAG
CAGATAGATGGTCCAGCAGGCTTGAAGCAGGGTAAGCAGGCTGGCCAGGGTAAGGGCTGTTGAGGTACCTTAAG
GGAAGGTCAAGAGGGAGATGGGCAAGGCGCTGAGGGAGGATGCTTAGGGGACCCCAAGAACAGGAGTCAGGAAA
ATGAGGCACATAAGCCTAAGAAGTTCCCTGGTTTTTCCAGGGGACAGGACCCACTGGGAGACAAGCATTATACT
TTCTTTCTTTCTTTTTTTTTTTTTTGGAGATCGAGTCTCGCTCTGTACCAGGCTGGAGTGCAGTGACACGATCTTG
GCTCACTGCAACCTCCGTCTCCTGGGTTCAAGTGATTCTTCTGCCTCAGCCTCCCGAGCAGCTGGGATTACAGGC
GCCCACTAATTTTTTGTATTCTTAGTAGAAACGAGGTTTCAACATGTTGGCCAGGATGGTCTCAATCTCTTGACCT
CTTGATCCACCCGACTTGGCCTCCCGAAGTGATGAGATTATAGGCGTGAGCCACCGCGCCTGGCTTATACTTTCT
TAATAAAAAGGAGAAAGAAAATCAACAAATGTGAGTCATAAAGAAGGGTTAGGGTGATGGTCCAGAGCAACAGTT
CTTCAAGTGACTCTGTAGGCTTCTGGGAGGTCCCTTTTCAGGGGTGTCCACAAAGTCAAAGCTATTTTCATAAT
AATACTAACATGTTATTTGCCTTTTGAATTCTCATTATCTTAAATTTGATTGTGGAGTTTTTCCAGAGGCCGTGT
GACATGTGATTACATCATCTTTCTGACATCATTGTTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3666

MRLPDVQLWLVLWLVRAQGTGSCVPCSGGSKLAPQAERALVLELAKQQILDGLHLTSRPRITHPPPQAALTRA
LRRLOPGSVAPGNNGEEVISFATVTDSTAYSLLTFHLSTPRSHHLYHARLWLHVLPTLPGTLCRLFRWGPRRR
RQGSRTLLAEHHITNLGWHITLTPSSGLRGEKSGVLKLQDRCRPLEGNSTVTGQPRRLDITAGHQPFLELKIRA
NEPGAGRARRRTPTEPATPLCCRRDHYVDFQELGWRDWILQPEGYQLNYCSGQCPPHLAGSPGIAASFHSAVFS
LLKANNPWPASTSCCVPTARRPLSLLYLDHNGNVVKTDVPMVVEACGCS

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FIGURE 3667

CCCAGACTCCAGCCCTGGACCGCGCATCCCGAGCCCAGCGCCCAGACAGAGTGTCCCCACACCCTCCTCTGAGAC
GCCATGTTCAACTCGATGACCCCCACCAATCAGTAGCTATGGCGAGCCCTGCTGTCTCCGGCCCCCTCCCCAGT
CAGGGGGCCCCCAGTGTGGGGACAGAAGGA¹CTGTCTGGCCCCGCCCTTCTGCCACCAAGCTAACCTCATGTCCGGC
CCCCACAGTTATGGGCCAGCCAGAGAGACCAACAGCTGCACCGAGGGGCCACTCTTTTCTTCTCCCGGAGTGCA
GTCAAGTTGACCAAGAAGCGGGCACTGTCCATCTCACCTCTGTTCGGATGCCAGCCTGGACCTGCAGACGGTTATC
CGCACCTCACCCAGCTCCCTCGTAGCTTTTCATCAACTCGCGATGCACATCTCCAGGAGGCTCCTACGGTCATCTC
TCCATTGGCACCATGAGCCCATCTCTGGGATTCCCAGCCCAGATGAATCACC²AAAAGGGGCCCTCGCCTTCCTTT
GGGGTCCAGCCTTGTGGTCCCCATGACTCTGCCCGGGGTGGGATGATCCCACATCCTCAGTCCCGGGGACCC³TT
CCAACTTGCCAGCTGAAGTCTGAGCTGGACATGCTGGTTGGCAAGTGCCGGGAGGAACCC⁴TGGAAGGTGATATG
TCCAGCCCCAACTCCACAGGCATACAGGATCCCCTGTTGGGGATGCTGGATGGGCGGGAGGACCTCGAGAGAGAG
GAGAAGCGTGAGCCTGAATCTGTGTATGAACTGACTGCCGTTGGGATGGCTGCAGCCAGGAATTTGACTCCCAA
GAGCAGCTGGTGCACCACATCAACAGCGAGCACATCCACGGGGAGCGGAAGGAGTTCGTGTGCCACTGGGGGGGC
TGCTCCAGGGAGCTGAGGGCCCTTCAAAGCCCAGTACATGCTGGTGGTTCACATGCGCAGACACACTGGCGAGAAG
CCACACAAGTGACGTTTGAAGGGTGCCGGAAGTCATACTACGCCCTCGAAAACCTGAAGACGCACCTGCGGTCA
CACACGGGTGAGAAGCCATACATGTGTGAGCACGAGGGCTGCAGTAAAGCCTTCAGCAATGCCAGTGACCGAGCC
AAGCACCAGAATCGGACCCATTCCAATGAGAAGCCGTATGTATGTAAGCTCCCTGGCTGCACCAAACGCTATACA
GATCCTAGCTCGCTGCGAAAACATGTCAAGACAGTGCATGGTCTGACGCCCATGTGACCAAACGGCACCGTGGG
GATGGCCCCCTGCCTCGGGCACCATCCATTTCTACAGTGGAGCCCAAGAGGGAGCGGGAAGGAGGTCCCATCAGG
GAGGAAAGCAGACTGACTGTGCCAGAGGGTGCCATGAAGCCACAGCCAAGCCCTGGGGCCAGTCATCCTGCAGC
AGTGACCACTCCCCGGCAGGGAGTGACGCCAATACAGACAGTGGTGTGGAATGACTGGCAATGCAGGGGGCAGC
ACTGAAGACCTCTCCAGCTTGGACGAGGGACCTTGCAATGCTGGCACTGGTCTGTCCACTCTTCGCCGCTTGAG
AACCTCAGGCTGGACAGCTACATCAACTCCGGCCAATAGGGACCCGGGTCTCAAAGTCCCAGCTTGTCCAC
ACCGGTACCACGTGTGTCCCGCCGCTGGGCCCCCAAGTCTCTCTTGAACGCCGAGCAGCAGCTCCAGCAGCATC
AGCTCTGCCTATACTGTGACCGCCGCTCCTCCTGGCCTCTCCTTTCCCCCTGGCTCCCCACCAAGAGAAATGGA
GCATCCTCCCTGCCTGGCCTTATGCCTGCCAGCATACCTGCTTGGGCAAGATATGCTTCAGCCAGAGGGGGT
GGTACTTCGCCCAGTGCAGCATCCAGCCTGGATCGGATAGGTGGTCTTCCCATGCCCTCCTTGGAGAAGCCGAGCC
GAGTATCCAGGATACAACCCCAATGCAGGGGTACCCCGAGGGCCAGTGACCCAGCCCAGGCTGCTGACCGTCTCT
GCTCCAGCTAGAGTCCAGAGGTTCAAGAGCCTGGGCTGTGCCATACCCACCCACTGTGGCAGGGGGAGGACAG
AACTTTGATCCTTACCTCCCAACCTCTGTCTACTCACACAGCCCCCAGCATCACTGAGAATGCTGCCATGGAT
GCTAGAGGGCTACAGGAAGAGCCAGAAGTTGGGACCTCCATGGTGGGCAGTGGTCTGAACCCCTATATGGACTTC
CCACCTACTGATACTCTGGGATATGGGGGACCTGAAGGGGCGAGCAGCTGAGCCTTATGGAGCGAGGGGTCCAGGC
TCTCTGCCCTTGGGCTGGTCCACCCACCAACTATGGCCCCAACCCCTGTCCCCAGCAGGCCTCATATCCTGAC
CCCACCAAGAAACATGGGGTGAGTTCCCTTCCCACTCTGGGCTGTACCCAGGCCCCAAGGCTCTAGGTGGAACC
TACAGCCAGTGTCTCGACTTGAACATTATGGACAAGTGCAAGTCAAGCCAGAACAGGGGTGCCAGTGGGGTCT
GACTCCACAGGACTGGCACCCCTGCCTCAATGCCCACCCAGTGAGGGGGCCCCACATCCACAGCCTCTCTTTTCC
CATTACCCCCAGCCCTCTCCTCCCCAATATCTCCAGTCAGGCCCCATACCCAGCCACCCCTGATTATCTTCTCT
TCAGAACCCAGGCCTTGCCCTGGACTTTGATTCCCCCACCATTCCACAGGGCAGCTCAAGGCTCAGCTTGTGTGT
AATTATGTTCAATCTCAACAGGAGCTACTGTGGGAGGGTGGGGGCGAGGGAAGATGCCCCCGCCAGGAACCTTCC
TACCAGAGTCCCAAGTTTCTGGGGGGTTCAGGTTAGCCCAAGCCGTGCTAAAGCTCCAGTGAACACATATGGA
CCTGGCTTTGGACCCAACCTGCCCAATCACAAGTCAGGTTCTATCCCACCCCTTACCATGCCATGAAAATTTT
GTAGTGGGGGCAAAATAGGGCTTCACATAGGGCAGCAGCACCACTCGACTTCTGCCCCATTGCCCACTTGCTAT
GGGCTCTCAAAGTGGGAGGCACAAACCCAGCTGTGGTATCCTGAGGTGGGCGAGGCTAGGAGGGGTCTGCCC
TTGTACCCCTCCTCCGAAGGACAGGTATGTAACCCCTGGACTCTCTTGATCTTGACAACACTCAGCTGGACTTT
GTGGCTATTCTGGATGAGCCCCAGGGGCTGAGTCTCTCCTTCCCATGATCAGCGGGCAGCTCTGGACATACC
CCACCTCCCTCTGGGCCCCCAACATGGCTGTGGGCAACATGAGTGTCTTACTGAGATCCCTACCTGGGGAACA
GAATTCCTCAACTCTAGTGCC⁵TAAAGAGTAGGGAATCTCATCCATCACAGATCGATTTCTTAAGGGGTTTCTAT
CCTTCCAGAAAAATTGGGGGAGCTGCAGTCCCCTGCACAAGATGCCCCAGGGATGGGAGGTATGGGCTGGGGGCT
ATGTATAGTCTGTATACGTTTTGAGGAGAAATTTGATAATGACACTGTTTCTGATAATAAAGGAAC⁶TGCATCAG

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FIGURE 3667A

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FIGURE 3668

MFNSMTPPPISSYGEPCLRLPLPSQGAPSVGTEGLSGPPFCHQANLMSGPHSYGPARETNSCTEGPLFSSPRSAV
KLTKKRALSISPLSDASLDLQTVIRTSFSSSLVAFINSRCTSPGGSYGHLSIGTMSPSLGFPAQMNHQKGPSPSFG
VQPCGPHDSARGGMIPHPQSRGPFPTCQLKSELDMVLVGKCREEPLEGDMSSPNSTGIQDPLLGMLDGREDLEREE
KREPESVYETDCRWDGCSQEFDSQEQLVHHINSEHIHGERKEFVCHWGGCSRELRPFKAQYMLVVHMRRHTGEKP
HKCTFEGCRKSYSRLNLKTHLRSHTEGKPYMCEHEGCSKAFSNASDRAKHQNRTHSNEKPYVCKLPGCTKRYTD
PSSLRKHVKTVHGPDAHVTKRHRGDGPLPRAPSISTVEPKREREGGP IREESRLTVPEGAMKQPSPGAQSSCSS
DHSPAGSAANTDSGVEMTGNAGGSTEDLSSSLDEGPCIAGTGLSTLRLENLRLDQLHQLRP IGTGLKLP SLSHT
GTTVSRRVGPPVSLERRSSSSSSISSAYTVSRRSSLASFPFPGSPENGASSLPGLMPAQHYLLRARYASARGGG
TSPTAASSLDRIGGLPMPPWRSRAEYPGYNPNAGVTRRASDPAQAADRPAPARVQRFKSLGCVHTPPTVAGGGQN
FDPYLP TSVYSPQPPSITENAAMDARGLQEEPEVGTS MVGSGLNPMDFPPTDTLGYGGPEGAAAEPYGARGPGS
LPLGPGPPTNYGPNPCPQQASYPDPTQETWGEFP SHSGLYPGPKALGGTYSQCPRLEHYGQVQVKPEQGCPVGS
STGLAPCLNAHPSEGPPHPQLFSHYQPSPPPQYLQSGPYTQPPDYLPSEPRPCLD FDSPTHSTGQLKAQLVCN
YVQSQQELLWEGGGREDAPAQEPSYQSPKFLGGSQVSPSRAKAPVNTYGPFGPNLPNHKSGSYPTSPCHENFV
VGANRASHRAAAPRLLPPLPTCYGPLKVGGTNP SCGHPEVGRLGGGPALYPPPEGQVCNPLDSL DLDNTQLDFV
AILDEPQGLSPPPSHDQRGSSGHTPPPSGPPNMAVGNM SVLLRSLPGETEFLNSSA

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FIGURE 3669

ATCAGCGAGGGATTACGGCGAAATGAGACTGTTTCGTGAGTGATGGCGTCCCGGGTTGCTTGCCGGTGCTGGCCG
CCGCCGGGAGAGCCCCGGGGCAGAGCAGAGGTGCTCATCAGCACTGTAGGCCCGGAAGATTGTGTGGTCCCGTTCC
TGACCCGGCCTAAGGTCCCTGTCTTGACGTGGATAGCGGCAACTACCTCTTCTCCACTAGTGCAATCTGCCGAT
ATTTTTTTTTTGTATCTGGCTGGGAGCAAGATGACCTCACTAACCAGTGGCTGGAATGGGAAGCGACAGAGCTGC
AGCCAGCTTTGTCTGCTGCCCTGTACTATTTAGTGGTCCAAGGCAAGAAGGGGGAAGATGTTCTTGGTTTCAGTGC
GGAGAGCCCTGACTCACATTGACCACAGCTTGAGTCGTGAGAACTGTCCTTTCTGGCTGGGGAGACAGAATCTC
TAGCCGACATTGTTTTGTGGGGAGCCCTATACCCATTACTGCAAGATCCCGCCTACCTCCCTGAGGAGCTGAGTG
CCCTGCACAGCTGGTTCCAGACACTGAGTACCCAGGAACCATGTGACGAGCTGCAGAGACTGTACTGAAACAGC
AAGGTGTCCTGGCTCTCCGGCCTTACCTCCAAAAGCAGCCCCAGCCCGCTGAGGGAAGGGCTGTACCA
ATGAGCCTGAGGAGGAGGAGCTGGCTACCTATCTGAGGAGGAGATTGCTATGGCTGTTACTGCTTGGGAGAAGG
GCCTAGAAAGTTTGGCCCCGCTGCGGCCCCAGCAGAATCCAGTGTGCTGTGGCTGGAGAAAGGAAATGTGCTCA
TCACCAGTGGCCTCCCTTACGTCAACAATGTCCCCACCTTGGGAACATCATTGGTTGTGTGCTCAGTGCCGATG
TCTTTGCCAGGTACTCTCGCCTCCGCCAGTGGAAACACCTCTATCTGTGTGGGACAGATGAGTATGGTACAGCAA
CAGAGACCAAGGCTCTGGAGGAGGGACTAACCCCCAGGAGATCTGCGACAAGTACCACATCATCCATGCTGACA
TCTACCGCTGGTTTAACATTTTCGTTTGATATTTTGGTCGCACCACCCTCCACAGCAGACCAAAATCACCCAGG
ACATTTTCCAGCAGTTGCTGAAACGAGGTTTTGTGCTGCAAGATACTGTGGAGCAACTGCGATGTGAGCACTGTG
CTCGCTTCTCTGGCTGACCGCTTCTGTGGAGGCGTGTGTCCCTTCTGTGGCTATGAGGAGGCTCGGGGTGACCAGT
GTGACAAGTGTGGCAAGCTCATCAATGCTGTGAGCTTAAGAAGCCTCAGTGTAAGTCTGCCGATCATGCCCTG
TGGTGCAGTCGAGCCAGCACCTGTTTCTGGACCTGCCTAAGCTGGAGAAGCGACTGGAGGAGTGGTTGGGGAGGA
CATTGCCTGGCAGTGACTGGACACCCAATGCCAGTTTATCACCCGTTCTTGGCTTCGGGATGGCCTCAAGCCAC
GCTGCATAACCCGAGACCTCAAATGGGGAACCCCTGTACCCTTAGAAGGTTTTGAAGACAAGGTATTCTATGTCT
GGTTTGATGCCACTATTGGCTATCTGTCCATCACAGCCAACTACACAGACCAGTGGGAGAGATGGTGGAGAACC
CAGAGCAAGTGGACCTGTATCAGTTCATGGCCAAAGACAATGTTCCCTTCCATAGCTTAGTCTTCCCTTGCTCAG
CCCTAGGAGCTGAGGATAACTATACCTTGGTCAGCCACCTCATTGCTACAGAGTACCTGAACTATGAGGATGGGA
AATTCTCTAAGAGCCGCGGTGTGGGAGTGTGGGGACATGGCCAGGACACGGGGATCCCTGCTGACATCTGGC
GCTTCTATCTGCTGTACATTGGCCTGAGGGCCAGGACAGTGTCTTCTCCTGGACGGACCTGCTGCTGAAGAATA
ATTCTGAGCTGCTTAACAACCTGGGCAACTTCATCAACAGAGCTGGGATGTTTGTGTCTAAGTTCTTGGGGGCT
ATGTGCCTGAGATGGTGTCTACCCCTGATGATCAGCGCCTGCTGGCCATGTACCCCTGGAGCTCCAGCACTATC
ACCAGCTACTTGAGAAGGTTCCGATCCGGGATGCCTTGCGCAGTATCCTCACCATATCTCGACATGGCAACCAAT
ATATTCAGGTGAATGAGCCCTGGAAGCGGATTAAAGGCAGTGAGGCTGACAGGCAACGGGCAGGAACAGTGACTG
GCTTGGCAGTGAATATAGCTGCCTTGCTCTCTGTCTGCTTACGCCTTACATGCCACGGTTAGTGCCACAATCC
AGGCCCAGCTGCAGCTCCACCTCCAGCCTGCAGTATCCTGCTGACAACTTCTGTGTACCTTACCAGCAGGAC
ACCAGATTGGCACAGTCACTCCCTTGTTCCAAAAATTGGAATGACCAGATTGAAAGTTTAAGGCAGCGCTTTG
GAGGGGGCCAGGCAAAAACGTCCCCGAAGCCAGCAGTTGTAGAGACTGTTACAACAGCCAAGCCACAGCAGATAC
AAGCGCTGATGGATGAAGTGACAAAACAAGGAACATTGTCCGAGAAGTGAAGCACAAAAGGCAGACAAGAACG
AGGTTGCTGCGGAGGTGGCGAACTCTTGATCTAAAGAAACAGTTGGCTGTAGCTGAGGGGAAACCCCTGAAG
CCCTTAAAGGCAAGAAGAAAAAGTAAAGACCTTGGCTCATAGAAAGTCACTTTAATAGATAGGGACAGTAATAA
ATAAATGTACAATCTCTATA

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FIGURE 3670

MRLFVSDGVP GCLPVLAAAGRARGRAEVLISTVGPEDCVVPFLTRPKVPVLQLDSGNYLFSTSAICRYFFLLSGW
EQDDL TNQWLEWEATELQPALSAALYYLVVQGKKGEDVLGSVRRAL THIDHSLSRQNC PFLAGETESLADIVLWG
ALYPLLQDPAYLPEELSALHSWFQTLSTQEP CQRAAETVLKQQGV LALRPYLQKQPQSPAEGRAVTNEPEEEEL
ATLSEEEIAMAVTAWEKGL ES LPP LRPQQNPVLPVAGERNVLITSALPYVNNVPHLGNIIGCVLSADV FARYSRL
RQWNTLYLCGTDEYGTATETKALEEGLTPQEICDKYHIIHADIYRWFNISFDIFGR TTTT PQQTKITQDIFQQLLK
RGFVLQDIVEQLRCEH CARFLADRFVEGVCPFCGYEEARGDQCDKCGKLINAVELKKPQCKVCRSCP VVQSSQHL
FLDLPKLEKRLEEWLGRTLPGSDWTPNAQF ITRSWLRDGLKPRCITRDLKWGTPVPLEGFEDKV FYVWFDATIGY
LSITANYTDQWERWWKNPEQVDLYQFMAKDNVPFHS LVFP CSALGAEDNYTLVSHLIATEY LNYEDGKFSKRGV
GVFGDMAQDTGIPADIWRFYLLYIRPEGQDSAFSWTDL LKNNSELLNNLGNFINRAGMFVSKFFGGYVPEMVL T
PDDQRLLAHV TLELQHYHQLLEKVRIRDALRSILTISRHNQYIQVNEPWKRIKGEADRQRAGTVTGLAVNIAA
LLSVMLQPYMPTVSATIQAQLQLPPPAC SILLTNFLCTLPAGHQIGTVSPLFQKLENDQIESLRQRFGGGQAKTS
PKPAVVETVTTAKPQQIQALMDEVTKQGNIVRELKAQKADKNEVAAEVAKLLDLKKQLAVAEGKPPEAPKGKKKK

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FIGURE 3671

AGAGACTTAAGTCTAAGGCACTGAGCGTATCATGTTAAAGATGAGCGGGTGGCAGCGACAGAGCCAAAATCAGAG
CTGGAACCTGAGGAGAGAGTGTTCAGAAGGAAGTGTATCTTCATACATCACCACACCTGAAAGCAGGCATCAGA
CCAGCTTGCCAACCTTGTGGCATAGACTGTTTGCTACATGGAGCTTGTTCAGCCACTCCCCATTATCCTGCAGAT
GTGCTTTTCCAGACTGATCCAACCTGCAGAGATGGCAGCTGAGTCATTGCCTTTCTCCTTCGGGACACTGTCCAGC
TGGGAGCTGGAAGCCTGGTATGAGGACCTGCAAGAGGTCCTGTCTTCAGATGAAAATGGGGGTACCTATGTTTCA
CCTCCTGGAAATGAAGAGGAAGAATCAAAAATCTTCACCACTCTTGACCCTGCTTCTCTGGCTTGGCTGACTGAG
GAGGAGCCAGAACCAGCAGAGGTCACAAGCACCTCCCAGAGCCCTCACTCTCCAGATTCCAGTCAGAGCTCCCTG
GCTCAGGAGGAAGAGGAGGAAGACCAAGGGAGAACCAGGAAACGGAAACAGAGTGGTCATTCCCCAGCCCGGGCT
GGAAAGCAGCGCATGAAGGAGAAAGAACAGGAGAATGAAAGGAAAGTGGCACAGCTAGCTGAAGAGAATGAACGG
CTCAAGCAGGAAATCGAGCGCCTGACCAGGGAAGTAGAGGCGACTCGCCGAGCTCTGATTGACCGAATGGTGAAT
CTGCACCAAGCATGAACAATTGGGAGCATCAGTCCCCCACTTGGGCCACACTACCCACCTTTCCCAGAAGTGGCT
ACTGACTACCTCTCACTAGTGCCAATGATGTGACCCTCAATCCCACATACGCAGGGGGAAGGCTTGGAGTAGAC
AAAAGGAAAGGTCTCAGCTTGTATATAGAGATTGTACATTTATTTATTACTGTCCCTATCTATTAAAGTGACTTT
CTATGA

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FIGURE 3672

ATGCGCGGGAGGCCGCTCGGTGATCCGCGGCGGGCGGCAGCGGCGCTTCTGCTAGGACCGGCCGGGGCCGTACCG
GAGGCTCGGGCTCCACCGACCCCTCCTCCCACCCCTCCCACTCACCTCTGGGCCGCGACTGCGCAGGGCGGGGC
CGGCCGAACCATGGGCCGCGGTGTGGGCTAAGCTGGTGGCCCCGGCTTTAGACTGGACCCCAACAATGTTTGAGA
GATGTTTCAGGCACGCGGGAGCTGATTACACACAATGAATGGGGGCAATGAGAGCAGTGGAGCAGACAGAGCTGGG
GGCCCTGTGGCCACATCTGTCCCCATCGGCTGGCAGCGCTGTGTGCGAGAGGGTGCTGTGCTCTACATCAGTCCA
AGTGGCACAGAGCTGTCTTCTTGGAGCAAACCCGGAGCTACCTCCTCAGCGATGGGACCTGCAAGTGCGGTCTG
GAGTGTCCACTTAATGTCCCCAAGGTTTTCAACTTTGACCTTTGGCCCCGGTGACCCCGGGTGGGGCTGGGGTG
GGGCCAGCATCAGAGGAGGACATGACCAAGCTGTGCAACCACGGCGGAAAGCTGTTGCTATGGCAACTCTGTAC
CGCAGCATGGAGACCACCTGCTCACACTCTTCTCCTGGAGAGGGAGCGAGCCCCCAAATGTTCCACACTGTGTCC
CCAGGGCCCCCTCTGCCCCCTCCTGTGAGTTCTCTCACTCCACTTAATGGGGGTCTGGCTCCCTT
CCCCCAGAACCACCTCAGTTTCCCAGGCCTTTCCCACTCTAGCAGGCCCTGGGGGGCTTTTCCCCCAAGGCTT
GCTGACCCAGTCCCTTCTGGGGGAGTAGCAGCCCCGTTTCTCCTCCCAAGGGGCAATGCCCTCTCCAGCCCCA
CCTCCTCCACCTGCTATCAGCCTCAATGCTCCCTCATACAACCTGGGGAGCTGCCCTCAGATCCAGCCTGGTGCCC
TCTGACCTGGGCTCTCCTCCGGCCCCCTCATGCCTCCTCCTCACCACCTTCAGACCTCCTCTCTTCCACTGTAGT
GATGCCTTAACACCCCTCCCTGCCCCGAGCAATAATCTCCCCGCCACCCCTGGTCTGCTCTCAGCCACCA
GTGTCTTCAGCCACTATGCACCTGCCCTGGTCTGGGGCCCCCTGGGAGGGGCCCCACGGTGGAGGGGCTGGG
GCACCCCTTCTTGTAGCAGCCTACTCTCTGCAGCGGCAAGGCACAGCATCCCCACTACCCCTCCCAGC
ACTTTACAGGGCCGAAGGCCCCGTGCCAGGCACCTCAGCTTCCCACTCCTCATCACTTCGTCCCTCTCAGCGT
CGTCCCCGAGACCCCTACTGTATTTGATTGCTAGAAGGGAGAGGCCCTCAAACCCCTAGACGGAGCGTCTCT
CGGGCCCCCTGCTCCTGTCCCCAACCCTTTTCTCTCCGGAGCCATCCCAACCAATTCTCCCTTCTGTGTGCTCC
CTGCTGGGACTCCCCACCCCTGGCCCTTCCCACTCTGATGGAAGCTTTAACCTTTTGGGGTCAATGCACACCTT
CCTCCTCCCCAACCCTCTCCTCAGGGAGCCCTCCCAGCCAGGCACCCATCCAGCCCTCCCTGCTGGGACC
ACCAGTGGCAGCCTCAGCAGTGTGCCAGGTGCCCTGCCACCAGCTGCCCTCAAAGCCCCAGTAGTCCCCAGC
CCTGTGCTTCAAAGCCCATCCGAAGGACTGGGATGGGGCAGGCCGGCCTGCCCTCTGCCCTCCCTGGCTGGT
GGAGAGGCTTTCCCTTTCCCCAGCCCTGAGCAGGGCCTGGCACTGAGTGGAGCTGGCTTCCCTGGGATGCTTGGG
GCCTTGCCCTCTCCCTCTGAGTCTGGGGCAGCTCCACCTTCTCATTGCTCAACCACAGTTTATTGTGTGCTG
ACTGGGGGAGGAGCAACCTCCCCCTGAGCCCTGACTACCCCAACAGGAGGACCTGGTCTCCCTAGCCCCA
GGAGAGCCTGAAGGGCTTCCCTTTTGGTGGCTTCTGCTTCCCTCCACCACCTCAGACCTTCTTCCACCTCT
TCAGCACCTCCAGCAACCTCCTTGCCTCTTCTGCTGCCCTGTTGGCTCTGGGCCCCACAGCTGGGGATGGGGAG
GGATCTGCAGAGGGAGCCGGGGGTCCAAGTGGGGAGCCATTTTCAGGCTTGGGAGACCTGTCCCCCTACTTTTC
CCCCACTTTTCAGCCCCCTACCTCATAGCTTTAAATTCTGCGCTGCTGGCTGCCACCCTGGATCCCCCTCG
GGGACACCCCCCAGCCCTGTGTCTGAGTGCCCCCAACCTGGACCACCTACCTCCAGTGTACCCACGGCAACT
ACTGACCCGGGGGCTCCTCTCTGGGCAAGGCCCTTCAACTCAGGGAGACCCCCCAACTCTTAGCCCTCTG
CTGGGTGCCAGCCTGCTGGGTGACCTGTCTTCACTGACCAGCAGCCCTGGAGCCCTCCCCAGCCTGTTGCAGCCT
CCTGGCCCTCTTCTCTGCGCAGTTGGGGTGCAGCTCCTCCCTGGGGGGGAGCTCCTCCACCCCTCTCAGAG
GCTTCTAGTCCCCTAGCCTGCCTGCTACAGAGTCTCCAGATCCCTCCAGAGCAGCCAGAAGCCCCCTGTCTACCC
CCCAGAGCCCTGCCCTCAGCCCTCGAACAGAGCCTGCCAGGCCCTCCCTCAGTGCCTTAGCCCCACCCCATGGT
TCTCCCGACCCCCCAGTCCCTGAGCTGCTCACTGGGAGGGGGTCAGGGAAACGGGGCCGGAGGGGAGGGGGGA
CTTAGGGGCATTAATGGTGAGGCCAGGCCAGCCGGGGCCGAAAGCCTGGCAGCCGGCGGGAGCCTGGCCGACTG
GCCCTCAAATGGGGGACACGTGGTGGCTTCAATGGACAAATGGAAAGGTCCCCAAGAAGAACCCACCATTTGGCAG
CATAATGGGGAGCTGGCTGAAGGGGGTGTGAGCCCAAGGATCCACCCCTCCCGGGCCCCATTCTGAGGACCTT
AAGGTGCCCGGGGAGTAGTCAGAAAGTCTCGTCGTGGCCGTAGGAGAAAATACAACCTACCCGGAACAGCAAT
AGCTCCCGCCAGGACATTACCTTGGAAACCCAGCCCTACAGCCCGAGCAGCTGTCCCTCTGCCTCCCCGGGCCCGC
CCTGGCCGTCTGCCAAAAACAAGAGGAGGAAACTGGCCCCATAGCAGCCATACCTGGAGCTGGATCTGACCCTG
ATTGGGGAGAGCTGAGTGTGAGCCTTGGGAGCCCTGCCAGCCACCTGCACCTGCTGCCCTCCTTCCAGTGAA
AGAGACGTTGTGATGATGCGACTGAGGATTATGCAACGTGGTCCAACCGGAGCGGCCAGCATGACCAGCTGTCCA
GGGGCTGCCTCCTGCCTTTTCTTTGTAAAGACAAGACCTTGGGAGTTTTTAATTCTGTTTTGTACTTGCCCTGT
GGGGCTCCACTGCTTTTCTATGGGAGACACTCTTAATTTAACAGATGAGAATATTTTGAAACTCTG

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FIGURE 3673

MEALTFWQMHTFLLPQPSPQGALPSPGTPSSPPCLGPPVAASAVCQVPLPHQLPPKPHVVPSPVLQSPSEGLGM
GAGPACPLPPLAGGEAFPPPSPEQGLALSGAGFPGMLGALPLPLSLGQPPPSPLLNHSLFGVLTGGGGQPPPEPL
LPPPGGPGPPLAPGEPEGPSLLVASLLPPPPSDLLPPPSAPPSNLLASFLPLLALGPTAGDGEGSAEGAGGPSGE
PFSGLDLSPLLFPPLSAPPTLIALNSALLAATLDPPSGTTPQPCVLSAPQPGPPTSSVTTATTDPGASSLGKAP
SNSGRPPQLLSPLLGLSLLGDLSSLTSSPGALPSLLQPPGPLLSGQLGLQLLPGGGAPPPLSEASSPLACLLQSL
QIPPEQPEAPCLPPESPASALEPEPARPPLSALAPPHGSPDPPVPELLTGRGSGKRGRRGGGGLRGINGEARPAR
GRKPGSRREPGRALALKWGTRGGFNGQMERSPRRTHHWQHNGELAEGGAEPKDP PPPPGPHSEDLKVPPGVVRKSRR
GRRRKYNPTRNSNSSRQDITLEPSPTARGAVPPTTRARPGRPAKNKRRKLTP

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FIGURE 3674

GAGACTTCCTGCTCATCTGCCGCTCCCTTTGCCGCCGCCCTTAGCCCCGGGACCCGAACCCAGCCTCTCCCCTACCC
GAACACCCGGCCCCGGCTCCACCGAGGCCCGGGTCCCCAGCCCGTCTCGCCGCCGCCATGGCGGACCCATAAATAC
GCCGACCTTCCCGGCATTGCCAGGAATGAGCCAGATGTTTATGAACTAGCGACCTACCTGAGGATGATCAAGCG
GAGTTCGATGCGXXXXXXXXXXXXXXXXXGAGGAGCTGACAAGCACAAGTGTGGAACACATCATTGTCAATCCTAAT
GCTGCCTATGACAAGTTCAAGGACAAGAGAGTGGGGACAAAGGGACTTGATTTCTCAGATCGTATTGGAAAAACC
AAGAGGACAGGATATGAATCTGGAGAATATGAGATGCTTGGAGAGGGTCTGGGAGTGAAGGAGACACCCAGCAA
AAGTACCAGCGCTACTGTCATGAGGTCCAAGAGCTGACAAGTGAAGTTGAAAAATCAAGACGACAGTGAAGGAG
TCAGCCACAGAGGAGAAGCTGACCCCTGTGTTGCTGGCTAAACAGCTGGCAGCCCTGAAGCAGCAGCTGGTTGCT
TCCACCTGGAGAAGCTGCTGGGACCAGATGCTGCAATCAACCTTACCGACCCCGATGGCGCCCTGGCTAAGCGC
CTACTACTGCAGCTGGAAGCAACAAAGAACAGCAAAGGGGGATCAGGGGGAAAAACCACTGGGACCCCCCAGAT
AGCAGCCTTGTCACCTTATGAACTACATTCTCGGCCTGAGCAGGACAAGTTCTCTCAAGCTGCCAAAGTCGCAGAA
CTTGAAAAGCGCCTGACAGAGCTGGAGACAGCTGTACGTTGTGATCAGGATGCTCAGAATCCCCTTTCTGCAGGT
CTACAGGGAGCCTGTCTCATGGAGACTGTAGAGCTGTTGCAAGCAAAGGTGAGCGCCCTAGACCTTGCAGTTTTG
GATCAAGTGGAGGCTCGGCTACAGAGTGTCTGGGAAAGGTGAACGAGATTGCCAAGCATAAAGCCTCTGTAGAA
GATGCAGATACACAAAGCAAGGTGCACCAGCTATATGAACTATACAGCGCTGGAGCCCCATTGCCTCCACCCTC
CCTGAGCTGGTGCAGAGACTTGTCAACATCAAGCAGCTGCACGAGCAAGCCATGCAGTTTGGTCAGCTCCTGACA
CACTTGGATACCAACCAGCAGATGATTGCTAATTCCTTGAAGGACAATACCACCCTCTTGACCCAGGTGCAGACA
ACCATGCGTGAAAACCTGGCCACAGTTGAGGGGAACCTTGCCAGCATTGATGAACGGATGAAGAAGCTGGGAAAG
TGAGCACATTTGGGAGCTGGAGAACAGGGGTTATCCCTACCCCTGTGAACTCTGTTAACAGCTTACATAGGGTTT
CCCCCTTACTATAACTCTAGCATCCCCATCCATTTGACACTGGGGGCAAGGGTTCTTCTTGCATGTGGGGTTTA
TACCCCTCCCCTGATGAATACAGAGTGGTAGCTAGGGGTTGGTTATCATCAGAAGGTGGTCTCCCTCAGGCCTG
GGGATAAAGGACGTGGGGCCAGCCACATGCCAACTCATGTCCAATACTGCTTTGCCTGGTGTGGGGAAGGATTGG
GTCTTGTCCCCCAACACAGCTTCTGTGGCTGACTGTAATACTGTACAACCTGTTTCTGACCATTAAATGCTGTTGT
ACTCTG

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FIGURE 3675

MLGEGLGVKETPQQKYQRLLEHVQELTTEVEKIKTTVKESATEEKLTPVLLAKQLAALKQQLVASHLEKLLGPDA
AINLTDPDGALAKRLLLQLEATKNSKGGSGGKTTGTPPDSSLVTYELHSRPEQDKFSQAQKVAELEKRLTELETA
VRCDQDAQNPLSAGLQGAQCLMETVELLQAKVSALDLAVLDQVEARLQSVLGKVNEIAKHKASVEDADTQSKVHQL
YETIQRWSPIASTLPQLVQRLVTIKQLHEQAMQFGQLLTHLDTTQQMIANSKDNNTLLTQVQTTMRENLATVEG
NFASIDERMKKLGK

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FIGURE 3676

[illegible]

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FIGURE 3677

MLEPALATGEELPELTLLTTLLEGPGDKTQPPEEETLSQAPESEEEEQKKKALERSMYVLSELVETEKMYVDDLGO
IVEGYMATMAAQGVPESLRGRDRIVFGNIQQIYEWHRDYFLQELQRCLKDPDWLAQLFIKHERRLHMYVVYCQNK
PKSEHVVSSEFGDSYFEELRQQLGHRQLNDLLIKPVQRIMKYQLLLKDFLKYYNRAGMDTADLEQAVEVMCFVPK
RCNDMMTLGRLRGFEGKLTAAQKLLGQDTFWVTEPEAGLLSSRGRERRVFLFEQIIIFSEALGGGVRGGTQPGY
VYKNSIKVSCLGLEGNLQGDPCRFAITSRGPEGGIQRYVLQAADPAISQAWIKHVAQILESQRDFLNALQSPIEY
QRRESQTNSLGRPRGPGVGSPGRIRLGDQAQGSTHTPINGSLPSLLLSPKGEVARALLPLDKQALGDIPQAPHDS
PPVSPTPKTPPCQARLAKLDEDEL

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FIGURE 3678

TTGCACTCTCCACACCCCTTTCTTTTCGTCCGCTCTTCGCTTATTTCTCCCGCCGCTCTCTCTGCATAAGAAGG
GGAACGAAAGATGGCGGCGGAAACGCTGCTGTCCAGTTTGTTAGGACTGCTGCTTCTGGGACTCCTGTTACCCGC
AAGTCTGACCGGCGGTGTCTGGGAGCCTGAACCTGGAGGAGCTGAGTGAGATGCGTTATGGGATCGAGATCCTGCC
GTTGCCCTGTCAATGGGAGGGCAGAGCCAATCTTCGGACGTGGTGATTGTCTCCTCTAAGTACAAACAGCGCTATGA
GTGTGCGCTGCCAGCTGGAGCTATTCACTTCCAGCGTGAAAGGGAGGAGGAAACACCTGCTTACCAAGGGCCTGG
GATCCCTGAGTTGTTGAGCCCAATGAGAGATGCTCCCTGCTTGCTGAAGACAAAGGACTGGTGACATATGAATT
CTGTTATGGACGCCACATCCAGCAATACCACATGGAAGATTGAGAGATCAAAGGTGAAGTCTCTATCTCGGCTA
CTACCAATCAGCCTTCGACTGGGATGATGAAACAGCCAAGGCCTCCAAGCAGCATCGTCTTAAACGCTACCACAG
CCAGACCTATGGCAATGGGTCCAAGTGCAGCCTTAATGGGAGGCCCGGGAGGCCGAGGTTCCGTTTCTGTGA
CGAGGGGTGCAGGTATCTCTGGGGACTACATCGATCGCGTGGACGAGCCCTTGTCCTGCTCTTATGTGCTGACCAT
TCGCACTCCTCGGCTCTGCCCCACCCCTCTCCTCCGGCCCCCACCAGTGCTGCACCACAGGCCATCCTCTGTCA
CCCTTCCCTACAGCCTGAGGAGTACATGGCCTACGTTTCAAGAGGCAAGCCGACTCAAAGCAGTATGGAGATAAAAT
CATAGAGGAGCTGCAAGATCTAGGCCCCCAAGTGTGGAGTGAGACCAAGTCTGGGGTGGCACCCCAAAAGATGGC
AGGTGCGAGCCCGACCAAGGATGACAGTAAGGACTCAGATTTCTGGAAGATGCTTAATGAGCCAGAGGACCAGGC
CCCAGGAGGGGAGGAGGTGCCGGCTGAGGAGCAGGACCAAGCCCTGAGGCAGCAGATTGAGCTTCTGGTGCTCC
CAATGATTTTCAAGAACCGTGCAGGTCAAAGTCATTGCAAGCCCTGCGGATTTGATTGATTGATTGAGGAGCT
GAAAGGTGGAACAAAAAGGGGAAGCCAAATATAGGCCAAGAGCAGCCTGTGGATGATGCTGCAGAAGTCCCTCA
GAGGGAACAGAGAAGGAAAGGGGTGATCCAGAACGGCAGAGAGAGATGGAAGAAGAGGAGGATGAGGATGAGGA
TGAGGATGAAGATGAGGATGAACGGCAGTTACTGGGAGAATTTGAGAAGGAAGTGGAAAGGGATCCTGCTTCCGTC
AGACCGAGACCGGCTCCGTTCCGAGGTGAAGGCTGGCATGGAGCGGGAAGTGGAGAACATCATCCAGGAGACAGA
GAAAGAGCTGGACCCAGATGGGCTGAAGAAGGAGTCAGAGCGGGATCGGGCAATGCTGGCTCTCACATCCACTCT
CAACAAACTCATCAAAAGACTGGAGGAAAAACAGAGTCCAGAGCTGGTGAAGAAGCACAAGAAAAAGAGGGTTGT
CCCCAAAAGCCTCCCCATCACCCCAACCTACAGAGGAGGATCCTGAGCACAGAGTCCGGGTCCGGGTCACCAA
GCTCCGTCTCGGAGGCCCTAATCAGGATCTGACTGTCTCTGAGATGAAACGGGAAAACCCACAGCTGAAACAAAT
CGAGGGGCTGGTGAAGGAGCTGCTGGAGAGGGAGGGACTCACAGCTGCAGGGAAAATTGAGATCAAAATTGTCCG
CCCATGGGCTGAAGGGACTGAAGAGGGTGCACGTTGGCTGACTGATGAGGACACGAGAAACCTCAAGGAGATCTT
CTTCAATATCTTGGTGCCGGGAGCTGAAGAGGCCAGAAAGAACGCCAGCGGCAGAAAGAGCTGGAGAGCAATTA
CCGCCGGGTGTGGGCTCTCCAGGTGGGGAGGGCACAGGGGACCTGGACGAATTTGACTTCTGAGACCAACACTA
CACTTGACCCTTACGGAATCCAGACTCTTCTGGACTGGCTTGCTCCTCCCTCCCTCCCTCCCTGGAACCC
TGAGGGCCAAACAGCAGAGTGGAGCTGAGCTGTGGACCTCTCGGGCAACTCTGTGGGTGTGGGGGCCCTGGGTGA
ATGCTGCTGCCCCTGCTGGCAGCCACCTTGAGACCTCACCGGCCCTGTGATATTTGCTCTCTGAACTCTCACTC
AATCCTCTTCTCTCTCTCTCTGTTGCTTTTCTGTTATTGTCCCTAATGATAGGATATTCCTGCTGCCTACCTGG
AGATTGAGTAGGATCTTTTGAAGTGGAGGTGGGTAGAGAGAGCAAGGAGGGCAGGACACTTAGCAGGCACTGAGCA
AGCAGGCCCCCACCCTGCCCTTAGTGATGTTTGGAGTCGTTTACCTCTTCTATGAATTGCCTTGGGATTTCCT
TCTCCCTTTCCCTGCCACCCCTGTCCCTACAATTTGTGCTTCTGAGTTGAGGAGCCTTACCTCTGTTGCTGAG
GAAATGGTAGAATGCTGCCTATCACCTCCAGCACAAATCCAGCGAAAAAGGTGTGAAGCACCCACCATGTTCTTG
ACAATCAGGTTTCTAAATAAACAACCTGGACCATCA

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FIGURE 3679

MAAETLLSSLLGLLLLLGLLLPASLTGGVGS LNLEELSEMRYGIEILPLPVMGGQSQSSDVVIVSSSKYKQRYECRL
PAGAIHFQREEREETPAYQGPGIPELLSPMRDAPCLLKTKDWWTYEFCYGRHIQQYHMEDSEIKGEVLYLGYYQS
AFDWDEETAKASKQHRLKRYHSQTYGNGSKCDLNGRPREAEVRFLCDEGAGISGDYIDRVDEPLSCSYVLTIRT
RLCPHPLLRPPPSAAPQAILCHPSLQPEEY MAYVQRQADSKQYGDKII EELQDLGPQVWSETKSGVAPQKMAGAS
PTKDDSKDSDFWKMLNEPEDQAPGGEEVPAEEQDPSPEAADSASGAPNDFQNNVQVKVIRSPADLIRFIEELKGG
TKKGKPNIGQEQPVDDAAEVPQREPEKEKRGDPERQREMEEEDEDEDEDEDEDERQLLGEFEKELEGILLPSDRD
RLRSEVKAGMERELENIIQETEKELDPDGLKKESEDRAMLALTSTLNKLIKRL EEKQSP ELVKKHKKR VVPKK
PPSPQPT EEDPEHRVRVRVTKLRLGGPNQDLTVLEMKREN PQLKQIEGLVKELLEREG LTAAGKIEIKIVRPWA
EGTEEGARWLTD E DTRNLKEIFFN I LVPGAE EAQKERQ RQKELESNYRRVWGSPGGEGTGDLDEFDF

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FIGURE 3680

GATGAACGGCAGTTACTGGGAGAATTTGAGAAGGAACTGGAAGGGATCCTGCTTCCGTCAGACCGAGACCTGCTG
CCTACCTGGAGATTCACTAGGATCTTTTGAGTGGAGGTGGGTAGAGAGAGCAAGGAGGGCAGGACACTTAGCAGG
CACTGAGCAAGCAGGCCCCACCTGCCCTTAGTGATGTTTGGAGTCGTTTTACCCTCTTCTATTGAATTGCCTTG
GGATTTCTTCTCCCTTTCCCTGCCACCCCTGTCCCTACAATTTGTGCTTCTGAGTTGAGGAGCCTTCACCTCT
GTTGCTGAGGAAATGGTAGAATGCTGCCTATCACCTCCAGCACAATCCCAGTGAAAAAGGTGTGAAGCACCACCC
ATGT

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FIGURE 3681

AATCCAGAGGCAGGGGAGGGACGGTGCAGGCGCAGAGTATTGGGTTTGGCTGGCCTCGATTTAAAGAGACAGAAG
CTGTCGGGGTCCTGGAAGACGGTCCCCAATACCCTCCCCCAAGTCCTTGGGACCACTTGGGTCCCCAGAGCTGG
GGAGATGTTTGTGGCGGCTTTGCCTGCTCCAAGAATGCGCTTTGCGCTCTCAACGTGGTCTACATGCTGGTGAG
CTTGTGCTCATTGGAGTGGCTGCTTGGGGCAAGGGCCTGGGICTGGTGTCCAGCATCCACATCATCGGCGGAGT
CATTGCTGTGGGAGTCTTCCTTCTCCTTATTGCAGTGGCTGGACTGGTGGGTGCTGTCAACCACCACCAAGTCCT
GCTGTTCTTTTACATGATCATCCTTGGTTTGGTCTTCATCTTCCAATTTGTAATCTCTTGCTCATGTCTGGCTAT
TAACCGAAGCAAACAGACAGATGTCAATGCTTCTTGGTGGGTCTATGAGCAACAAGACTCGGGATGAACTGGA
AAGAAGTTTTGATTGTTGTGGCTTATTCAACCTCACAACCTGTATCAACAAGATTATGATTTCTGCACTGCAAT
CTGCAAGAGCCAGAGCCCCACATGCCAGATGTGTGGAGAAAAGTTTCTTAAGCATTAGAGCAAGCCCTGAAAAT
CCTAGGGGGTGTGGACTCTTCTTTAGCTTTACAGAGATCCTTGGTGTGGCTAGCAATGAGATTTGGAATCA
GAAGGATCCTAGAGCCAACCCAGTGCTTTCTATGAGACTTTGGATCCTTCTGACTTTTCTTCTGCTCTCTCTA
AGCTTTCTCTTCTCCCTTAGGGAATATCTAGGGTCTGTAAACGTTTTGGTTTTGAGAAAAAGGAAAGGCCCTTG
TCACATCCTCTAAAATTGATGGAATAGCAAGACTTTATGCCTTGACATATTTTAGTGGGAGCCAGACTATAAGGA
ATAAAAGGAAAAACTTTCTTCTCTCTCTCCAAGAGGATATGGGAAGCTTCTGTGAGTGCATAGGATGGGGGCTG
GAGTCATTCTTAGCTGTTTCCCTTCTCTGTCCATATACTGGATCACCTCAACATACCCTGGTGTGGCTCTAAGG
GTAAATCAGGGATAGGGCCAAGGAGAAAAACAACCAAGAACTCTTTCCTGTAAATAAGCAGGATCCAGTTTGAGAAA
GTTTAGCGAATATAAAAGTAAAGCCATTTAAAAATCTATATTCTTTTTTTTTTTTGACACAGAGTCTTGCTCTGT
TGCCCAGGCTGGAGTGCAATGGCATGATCTCGGCTCACCGCAACCTCTGCCTCCCGGGTTCAAGCGATCCTCCTG
CCTCAGTCTCCCAAGTAGCTGGGATTACAGGTGTGCACCACCACGCCTGACTAATTTTGTATTTTGTAGTAGAGAC
AGGGTTTCACCATGTTAGTCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCACCCGCGTTGGCCTCCCAACG
TGCTGGGATTATAGGCGTGAGCCACCACGCCCCGCCTAAAATCCATATTCAAAGAAGCAATTTAGTTCTTTCT
AAGCTTTGTGTCAGTCAAGGGGCTCCACTGACTTCCTAGGCCCTGTAATTTAACCAGTCTTTAAGGTTTTGCAGGAA
AGTCCCTTCTTCCAAGTGGTTTTTCCAAATCGCACAAATGGCAAAGCCAAACAGAGGAAGAAACATTAAAAAAA
AAAAAGACCATTAAAAAAA
AAAAAAA

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FIGURE 3682

MVCGGFACSKNALCALNVVYMLVSLLLIGVAAWGKGLGVSSIHIIIGGVIAVGVFLLLIAGLVGAVNHHQVLL
FFYMIILGLVFIQFVISCCLAINRSKQTDVINASWWMSNKTRDELEERSFDCCGLFNLTTLYQQDYDFCTAIC
KSQSPTCQMCGEKFLKHSDEALKILGGVGLFFSFTEILGVWLAMRFRNQKDP RANPSAFL

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FIGURE 3683

AGCCCTCCAGTTTCCGCGCGCCTCTTTGGCAGCTGGTCACATGGTGAGGGTGGGGGTGAGGGGGCCTCTCTAGC
TTGCGGCCTGTGTCTATGGTCGGGCCCTCTGCGTCCAGCTGCTCCGGACCGAGCTCGGGTGTATGGGGCCGTAGG
AACCGGCTCCGGGGCCCCGATAACGGGCCGCCCCACAGCACCCCGGGCTGGCGTGAGGGTCTCCCTTGATCTGA
GAATGGCTACCTCTCGATAAGAGCCAGTGGCTGAAATTGGTGTGGTGCCTATGGGACAGTGTACAAGGCCGTG
ATCCCCACAGTGGCCACTTTGTGGCCCTCAAGAGTGTGAGAGTCCCCAATGGAGGAGGAGGTGGAGGAGGCCTTC
CCATCAGCACAGTTCGTGAGGTGGCTTTACTGAGGCGACTGGAGGCTTTTGAGCATCCCAATGTTGTCCGGCTGA
TGGACGTCTGTGCCACATCCCGAACTGACCGGGAGATCAAGGTAACCCTGGTGTGTTGAGCATGTAGACCAGGACC
TAAGGACATATCTGGACAAGGCACCCCCACCAGGCTTGCCAGCCGAAACGATCAAGGATCTGATGCGCCAGTTTC
TAAGAGGCCTAGATTTTCCTTCATGCCAATTGCATCGTTACCGAGATCTGAAGCCAGAGAACATTCTGGTGACAA
GTGGTGGAACAGTCAAGCTGGCTGACTTTGGCCTGGCCAGAATCTACAGCTACCAGATGGCACTTACACCCGTGG
TTGTTACACTCTGGTACCGAGCTCCCGAAGTTCTTCTGCAGTCCACATATGCAACACCTGTGGACATGTGGAGTG
TTGGCTGTATCTTTGCAAGAGATGTTTCGTGCAAAAGCCTCTCTTCTGTGGAAACTCTGAAGCCGACCAGTTGGGCA
AAATCTTTGACCTGATTGGGCTGCCTCCAGAGGATGACTGGCCTCGAGATGTATCCCTGCCCCGTGGAGCCTTTC
CCCCCAGAGGGCCCCGCCAGTGCAGTCGGTGGTACCTGAGATGGAGGAGTCGGGAGCACAGCTGCTGCTGGA
TGCTGACTTTTAACCCACACAAGCGAATCTCTGCCTTTTCGAGCTCTGCAGCACTCTTATCTACATAAGGATGAAG
GTAATCCGGAGTGAGCAATGGAGTGGCTGCCATGGAAGGAAGAAAAGCTGCCATTTCCCTTCTGGACACTGAGAG
GGCAATCTTTGCCTTTATCTCTGAGGCTATGGAGGGTCCTCCTCCATCTTTCTACAGAGATTACTTTGCTGCCTT
AATGACATTTCCCTCCCACCTCTCCTTTTGAGGCTTCTCCTTCTCCTTCCCATTTCTCTACACTAAGGGGTATGT
TCCCTCTTGTCCTTTCCCTACCTTTATATTTGGGGTCCTTTTTTATACAGGAAAAACAAAACAAAGAAATAATG
GCTTTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3684

MATSRYEPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVPNGGGGGGLP ISTVREVALLRRLEAFEHPNVVRLM
DVCATSRTDREIKVTLVFEHVDQDLRTYLDKAPPPGLPAETIKDLMRQFLRGLDFLHANCIVHRDLKPENILVTS
GGTVKLADFGGLARIYSYQMALTPVVVTLWYRAPEVLLQSTYATPVDMWVSGCIFAEMFRRKPLFCGNSEADQLGK
IFDLIGLPPEDDWPRDVSLPRGAFFPRGPRPVQSVVPEMEESGAQLLLEMLTFNPHKRI SAFRALQHSYLHKDEG
NPE

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FIGURE 3685

AGCCCTCCCAGTTTCCGCGCGCCTCTTTGGCAGCTGGTCACATGGTGAGGGTGGGGGTGAGGGGGCCTCTCTAGC
TTGCGGCCTGTGTCTATGGTCGGGCCCTCTGCGTCCAGCTGCTCCGGACCGAGCTCGGGTGTATGGGGCCGTAGG
AACCGGCTCCGGGGCCCCGATAACGGGGCCGCCCCACAGCACCCCGGGCTGGCGTGAGGGTCTCCCTTGATCTGA
GAATGGCTACCTCTCGATATGAGCCAGTGGCTGAAATTGGTGTCGGTGCCTATGGGACAGTGTACAAGGCCCGTG
ATCCCCACAGTGGCCACTTTGTGGCCCTCAAGAGTGTGAGAGTCCCCAATGGAGGAGGAGGTGGAGGAGGCCTTC
CCATCAGCACAGTTCGTGAGGTGGCTTTACTGAGGCGACTGGAGGCTTTTGAGCATCCCAATGTTGTCCGGCTGA
TGGACGTCTGTGCCACATCCCGAAGTACCAGGAGATCAAGAGATGTTTCGTGAAAGCCTCTCTCTGTGGAAA
CTCTGAAGCCGACCAGTTGGGCAAAATCTTTGACCTGATTGGGCTGCCTCCAGAGGATGACTGGCCTCGAGATGT
ATCCCTGCCCCGTGGAGCCTTTCCCCCAGAGGGCCCCCGCCAGTGCAGTCGGTGGTACCTGAGATGGAGGAGTC
GGGAGCACAGCTGCTGCTGGAAATGCTGACTTTTAACCCACACAAGCGAATCTCTGCCTTTCGAGCTCTGCAGCA
CTCTTATCTACATAAGGATGAAGGTAATCCGGAGTGAGCAATGGAGTGGCTGCCATGGAAGGAAGAAAAGCTGCC
ATTTCCCTTCTGGACACTGAGAGGGCAATCTTTGCCCTTATCTCTGAGGCTATGGAGGGTCCCTCCTCCATCTTC
TACAGAGATTACTTTGCTGCCTTAATGACATTCCCTCCCACCTCTCCTTTGAGGCTTCTCCTTCTCCTTCCCA
TTTCTCTACACTAAGGGGTATGTTCCCTCTTGTCCTTTCCCTACCTTTATATTTGGGGTCCCTTTTTTATACAGG
AAAAACAAAACAAAGAAATAATGGTCTTTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3686

MATSRYPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVPNGGGGGGLPISTVREVALLRLEAFEHPNVVRLM
DVCATSRTDREIKRCFVESLSSVETLKPTSWAKSLT

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FIGURE 3687

GGGGTTGAGATATGATGCTCAGGAGAAGCGCTTTCTTTTCGCGAGCACCCCTGAACCAGACCATGACCCAGACCCCTC
AAGTACGCCTCCAGAGTGTTCCATCGCGTCCGCTGGGCGCCCGAGTTGGGCGCCTCCCTAGGCTACCGAGAGTAC
CACTCAGCACGCCGGAGCTTGGCAGACATCCCAGGCCCTCTACGCCCAGCTTTCTGGCCGAACTTTCTGCAAG
GGGGGGCTGTGAGGCTACACGAGCTGCAGGTGCAGGGCGCCGCGCACTTCGGGCGGTGTGGCTAGCCAGCTTT
GGGACAGTGCGCACCGTGTACGTGGCTGCCCTGCACTCGTCGAGGAGCTGCTGCGACAGGAGGGACCCCGGCC
GAGCGCTGCAGCTTCTCGCCCTGGACGGAGCACCGCCGCTGCCGCCAGCGGGCTTGCGGACTGCTCACTGCGGAA
GGCGAAGAATGGCAAAGGCTCCGCACTCTCTGGCCCCGCTCCTCCTCCGGCCTCAAGCGGCCGCCCGCTACGCC
GGAACCTGAACAACGTAGTCTGCGACCTTGTGCGGCGTCTGAGGCGCCAGCGGGACGTGGCACGGGGCGGCC
GCCCTGGTTTCGGGACGTGGCGGGGAATTTTACAAGTTCGGACTGGAAGGCATCGCCGCGGTTCGTCTGGCTCG
CGCTTGGGCTGCCTGGAGGCTCAAGTGCCACCCGACACGGAGACCTTCATCCGCGCTGTGGGCTCGGTGTTTGTG
TCCACGCTGTTGACCATGGCGATGCCCCACTGGCTGCGCCACCTTGTGCCTGGGCCCTGGGGCCGCTCTGCCGA
GACTGGGACAGATGTTTGCATTTGCTCAGAGGCACGTGGAGCGGCGAGAGGCAGAGGCAGCCATGAGGAACGGA
GGACAGCCCCGAGAAGGACCTGGAGTCTGGGGCGCACCTGACCCACTTCCTGTTCCGGGAAGAGTTGCCCTGCCAG
TCCATCCTGGGAAATGTGACAGAGTTGCTATTGGCGGGAGTGGACACGGTGTCCAACACGCTCTCTTGGGCTCTG
TATGAGCTCTCCCGGCACCCCGAAGTCCAGACAGCACTCCACTCAGAGATCACAGCTGCCCTGAGCCCTGGCTCC
AGTGCCTACCCCTCAGCCACTGTTCTGTCCCAGCTGCCCTGCTGAAGGCGGTGGTCAAGGAGGTGCTAAGACTG
TACCTGTGGTACCTGGAAATTCTCGTGTCCCAGACAAAGACATTTCATGTGGGTGACTATATTATCCCCAAAAT
ACGCTGGTCACTCTGTGTCACTATGCCACTTCAAGGGACCCTGCCAGTTCCCAGAGCCAAATTCTTTTCGTCCA
GCTCGCTGGCTGGGGGAGGGTCCCAACCCCCACCCATTTGCATCTCTTCCCTTTGGCTTTGGCAAGCGCAGCTGT
ATGGGGAGACGCCTGGCAGAGCTTGAATTGCAAATGGCTTTGGCCAGATCCTAACACATTTTGAGGTGCAGCCT
GAGCCAGGTGCGGCCCCAGTTAGACCCAAGACCCGGACTGTCTGGTACCTGAAAGGAGCATCAACCTACAGTTT
TTGGACAGATAGTCCCATGGAAAGAGACTGTCATCATCACCTTTTCATTTCATCATAGGGATAAGATTTTTTGTAG
GCACAAGACCAAGGTATACATCTTCCCTAATGCCTATCTGACCAAACCTGGATAGAACCACCATAGTGAAGTGTG
AGGCGGCCCTGACCAATGTGTGAAGTATGCACTTGGCCTGACTCAGGAAGCCAGGTGAGAAAACCATGGTCTCTC
TGCTTGCTTGGCCCTTCTGATCATGTATGCATCCCCCAAGGATGAAATCAGATTTTAACATAATAATGCTGGATGG
CCTGAGGAAAGATTCAACTGCCTCTCTTTTGGGCTTTCATAGTGTTCAATTGATGCTGCTGGCTAAGCATTTATC
AAAGCATAAGCTCAGTAACTGTGCATCTGGTCTGTACCTGGTTGGTCTTCGTCTTTGCATGTAAGCTCTTTGAG
AGGAAGGGTGAAGCCTTATTTGTTTTTATGTCCCCTGCCAGGGCCTGTCTCTGACTAGGTGTACCATAACAT
TCTTAGATTGAATCTGAACCATGTGGCAGAAGGGATAAGCAGCTTACTTAGTAGGCTCTGTCTACCCCTTCCTT
CTTTGTCTTGGCCCTAGGAAGGTGAATCTGCCCTAGCCTGGTTTACGGTTTCTTATAACTCTCCTTTGCTCTCTG
GCCACTATTAAGTGGGTTTGCCCCATCACTTAGTTCTCAGGCAGAGACATCTTTGGGCCTGTCCCTGCCAGGCC
TCTGGCTTTTATATTGAAAATTTTAAATATTCACAAATTTTAGAATAAATCAAATATTCCATTCTT

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FIGURE 3688

MTQTLKYASRVFHRVRWAPELGASLGYREYHSARRSLADIPGPSTPSFLAELFCKGGLSRLHELQVQGA AHFGPV
WLASFGTVRTVYVAAPALVEELLRQEGPRPERCSFSPWTEHRRRCRQRACGLLTAEGEEWQRLRSLLAPLLLRPQA
AARYAGTLNNVCDLVRRLRRQRGRGTGPPALVRDVAGEFYKFGLEGIAAVLLGSRLGCLEAQVPPDTETTFIRAV
GSVFVSTLLTMAMPHWLRHLVPGPWGRLCRDWDQMFAFAQRHVERREAEAAAMRNGGQPEKDLESGAHLTHFLFRE
ELPAQSILGNVTELLLAGVDTVSNTLSWALYELSRHPEVQTALHSEITAALSPGSSAYPSATVLSQLPLLKAVVK
EVLRLYPVVPGNSRVPDKDIHVGDIIPKNTLVTLCHYATSRDPAQFPEPNSFRPARWLGEGETPHPFASLPFGF
GKRSCMGRRLAEELELQMALAQILTHFEVQPEPGAAPVRPKTRTVLVPERSINLQFLDR

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FIGURE 3689

GGCCTGCGCCTCCACGTGGATTTGGTAGAGAAACCCCGGACTGGGATCATGGCAGCCGAGACTCGGAACGTGGCC
GGAGCAGAGGCCCCACCGCCCCAGAAGCGCTACTACCGGCAACGTGCTCACTCCAACCCCATGGCGGACCACACG
CTGCGCTACCCCTGTGAAGCCAGAGGAGATGGACTGGTCTGAGCTATAACCCAGAGTTCTTCGCTCCACTCACTCAA
AATCAGAGCCACGATGACCCAAAGGATAAGAAAGAAAAGAGAGCTCAGGCCCAAGTGGAGTTTGCAGACATAGGC
TGTGGCTATGGTGGCCTGTTAGTGGAACTGTCACCGCTGTTCCCGAGACACACTTATTCTGGGTCTGGAGATCCGG
GTGAAGGTCTCAGACTATGTACAAGACCGGATTTCGGGCCCTACGCGCAGCTCCTGCAGGTGGCTTCCAGAACATC
GCCTGTCTCCGTAGCAATGCCATGAAGCACCTTCCTAACTTCTTCTACAAGGGCCAGCTGACAAAGATGTTCTTC
CTCTTCCCCGACCCACATTTCAAGCGGACAAAGCACAAGTGGCGAATCATCAGTCCCACCCTGCTAGCAGAATAT
GCCTACGTGCTAAGAGTTGGGGGGCTGGTGTATACCATAACCGATGTGCTGGAGCTACACGACTGGATGTGCACT
CATTTGGAAGAGCACCCACTGTTTGAGCGTGTGCCTCTGGAGGACCTGAGTGAAGACCCCGTTGTGGGACATCTA
GGCACCTCAACTGAGGAGGGGAAGAAAGTTCTACGTAATGGAGGGAAGAATTTCCAGCCATCTTCCGAAGAATA
CAAGATCCCGTCTCCAGGCAGTGACCTCCCAAACCCAGCCTGCCTGGTCACTGACTGTCTTACTCTACCTTAGCTG
GACCTCGTCTCCCAGGGATTAGAGAAAAGAGCAGGAGTCTGGGTCTTCCAGTTGAGACTGCTGGAGCTGAGAC
ACAGTACTCTCTTAAAGAAGGTGGGGGAGCTGCCCAGGGCAGAACCCACTGGTGTTCATGACTACCCCTGGCTCCT
CTCACCTTGTCCTCCACTGCCAACAGAAAACAAAGCAGCTGACTGAGATGGTCAAAGGACTTTGGACCATAGGG
GATCTTTGGAAGGCTGTGGGGTCTTGCTCTTCTTAGCACTCCTTTCTCCTTGAGATCTCTCCTCAGCTGGAA
TGAGGAATGTAGTCCATCTAAACTGCTTGCTAGGCTCAATTACCACTTCTGTTTGCTTTGTGGATCCTGGGATAA
CATGTATATGTGTACACATGCCTATTCTGCCATTTCTCAGGAAAGGGTGGAGTATGTATCATATGCCTTCTACCA
TCCTCCTGTCTCTCCCTGCGTAAGACTTGACCTGGGGAATCTGTGTTCCCTAAAAAAAAAAAAAAAAAAAAAA
AA

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FIGURE 3690

MAAETRVAGAEAPPPQKRYRQRAHSNPMADHTLRYPVKPEEMDSELYPEFFAPLTQNQSHDDPKDKKEKRAQ
AQVEFADIGCGYGGLLVELSPLFPDTLILGLEIRVKVSDYVQDRIRALRAAPAGGFQNIACLRSNAMKHLPNFFY
KGQLTKMFFLFDPDPHFKRTKHKWRIISPTLLAEYAYVLRVGGLVYTITDVLELHDMCTHFEEHPLFERVPLEDL
SEDPVVGHGLGTSTEEGKKVLRNGGKNFPAIFRRIQDPVLQAVTSQTSPLPGH

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[illegible]

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FIGURE 3692

MAAETRNVAGAEAPPPQKRYRQRAHSNPMADHTLR

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[illegible]

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FIGURE 3694

MAAETRVAGAEAPPPQKRYRQRAHSNPMADHTLRYPVKPEEMDWSSELYPEFFAPLTQNSHDDPKDKKEKRAQ
AQVEFADIGCGYGGLLADKDVLPPLPRPTFQADKAQVANHQSHPASRICLRAKSWGAGVYHNRCAGATRLDVHSFR
RAPTV

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FIGURE 3695

GGGGGGAGGGTGTTTATCGCGGCTAGAGAGATGTCGCTGCTGCGGTGCTGCGCGTGTTTCTGGTCGCGCGGACC
GGGAGCTACCCGGCTGGGTCTCTTCTGCGTCAGTCGCCCCAGCCAAGGCACACATTTTATGCTGGGCCCCGTCTG
TCTGCCTCGGCCTCCAGCAAGGAGCTCCTCATGAAGCTGCGGCGGAAAACAGGCTACTCCTTTGTAAATTGCAAG
AAAGCTCTGGAGACTTGTGGCGGGGACCTCAAACAGGCAGAGATCTGGCTCCACAAGGAGGCCAGAAAGGAGGGC
TGGAGCAAAGCTGCCAAGCTCCAAGGGAGGAAGACCAAAGAAGGCCTGATTGGGCTGTTGCAGGAAGGAAACACA
ACTGTATTAGTAGAGGTAAACTGTGAGACAGATTTTGTCTTAGAAATTTAAATTTCAACTGTTGGTCCAGCAA
GTAGCCCTTGGAACCATGATGCATTGTGACACCCTAAAGGATCAACCCTCTGCATACAGTAAAGTGCAGTGGCTC
ACGCCTGTAAACCTAGCACTTTGGGAGGCTGAAGCAGGTGGATCACTTGAGGGTTTCTTGAATTCCTCTGAGCTT
TCTGGACTTCCAGCTGGGCCTGACAGAGAAGGCTCACTCAAGGATCAGTTGGCTTTAGCAATTGGAAAACCTGGGA
GAAAACATGATTCTTAAACGAGCTGCATGGGTGAAGGTGCCATCTGGGTCTACGTTGGCTCTTATGTCCACGGA
GCAATGCAGAGTCCCTCACTTCACAAGCTGGTGTGGGGAAGTATGGGGCCCTGGTCATCTGTGAGACGTCTGAA
CAGAAAACAAACCTTGAAGACGTTGGCCGCCGCTTGGGCAGCATGTGGTGGGCATGGCCCCCTCTCTGTTGGC
TCCCTGGACGATGAGCCTGGGGGAGAGGCAGAGACTAAGATGCTGTCCCAGCCGTATTTGCTGGATCCCTCCATT
ACCTTGGGGCAGTATGTGCAGCCTCAGGGGGTGTGCGGTAGTAGACTTTGTGCGGTTTGAATGTGGAGAAGGTGAA
GAGGCAGCAGAACTGAATAGGTTCCAGAGACTTTTGGCCCAGGAGGAATATTTACTTTTAGCTCTGGACATCAT
TACAAAAAGGAATATTTCCCAAACCTCTTCAGACCGAGAATGCATGGGTAAAATTATTAAATAGTTGTATAATAA
AAATAATTTTTCTTGTGTCACAAAAA

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FIGURE 3696

MSLLRSLRVFLVARTGSYPAGSILLRQSPQPRHTFYAGPRLSASASSKELLMKLRRKTGYSFVNCKKALET CGGDL
KQAEIWLHKEAQKEGWSKAAKLQGRKTKEGLIGLLQEGNTTVLVEVNCETDFVSRNLKFQLLVQQVALGTMMHCQ
TLKDQPSAYSQVWLTPVNLALWEAEAGGSLEGFLNSSELSGLPAGPDREGSLKDQLALAIGKLGEMILKRAAW
VKVPSGFYVGSYVHGAMQSPSLHKLVLGKYGALVICETSEQKTNLEDVGRRLGQHVVGMAPLSVGS LDDEPGGEA
ETKMLSQPYLLDPSITLGQYVQPQGVSVVDFVRFECGEGE EAAETE

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FIGURE 3697

GATGTTTCAGTCCTGGAAAGACAAGCATCATGCTCTGACCAGTGCCTTCAGGGCTGTGGACAACGACCCTGGGA
TCATTGTCTGGAGAATAGAGAAAATGGAGCTGGCGCTGGTGCCTGTGAGCGCCACGGCAACTTCTATGAGGGGG
ACTGCTACGTCATCCTCTCGACCCGGAGAGTGGCCAGTCTCCTATCCCAGGACATCCACTTCTGGATCGGGAAGG
ACTCCTCCCAGGATGAGCAAAGCTGCGCAGCCATATATACCACACAGCTGGACGACTACCTGGGAGGCAGCCCTG
TGCAGCACCGAGAGGTCCAGTACCATGAGTCAGACACTTTCCGTGGCTACTTCAAGCAGGGCATCATCTACAAGC
AGGGGGGTGTGCGCTCTGGGATGAAGCACGTGGAGACCAATACCTACGACGTGAAGCGGCTGCTACATGTGAAAG
GGAAAAGAAACATCAGGGCTACCGAGGTGGAAATGAGCTGGGACAGTTTCAACCGAGGTGATGTCTTCTTGCTGG
ACCTTGGGAAAGTCATCATCCAATGGAATGGCCCAGAGAGCAACAGTGGGGAGCGCCTGAAGGCTATGCTTCTGG
CAAAGGATATTCGAGACAGGGAGCGAGGGGGCCGTGCTGAAATAGGAGTGATCGAGGGAGACAAGGAGGCAGCCA
GCCCAGAGCTGATGAAGGTCTTCAGGACACCCCTTGGCCGACGCTCCATTATCAAGCCTACAGTCCCTGATGAGA
TCATAGATCAGAAGCAGAAATCAACTATCATGTTGTATCATATCTCAGATTACAGTGGGCAGCTGGCAGTCACAG
AGGTAGCAACAAGGCCCTCTGGTCCAGGACTTACTGAACCATGATGACTGCTACATCCTGGACCAAGTGGAAACCA
AAATCTACGTGTGGAAAGGAAAAGGAGCCACAAAGGCTGAAAAACAGGCAGCCATGTCTAAAGCGCTGGGCTTCA
TCAAGATGAAGAGCTACCCCAGCAGCACCAATGTGGAGACCGTCAACGATGGTGTGAGTCGGCCATGTTCAAGC
AGCTGTTCCAGAAGTGGTCAGTAAAGGACCAGACCATGGGCCTGGGGAAAACGTTTACGATTGGTAAATTTGCTA
AAGTTTTCCAGGATAAATTTGATGTGACTCTGCTACACACCAAGCCAGAGGTAGCTGCCAGGAAAGAATGGTCG
ATGATGGCAACGGAAAAGTTGAGGTCTGGAGAATTGAGAACCTGGAGCTGGTCCCTGTGGAGTATCAATGGTATG
GCTTCTTTTATGGGGGAGACTGTTATCTGGTCTCTACACATACGAGGTAAATGGGAAGCCACATCACATCTTGT
ACATCTGGCAGGGCCGCCACGCCTCACAGGATGAGCTGGCAGCCTCAGCATAACAGGCAGTGGAGGTGGATCGGC
AGTTTGATGGGGCTGCTGTGCAAGTTCGAGTCAGGATGGGAACGGAGCCACGCCACTTCATGGCCATCTTCAAAG
GGAAGCTAGTTATCTTTGAGGGTGGGACTTCCAGGAAGGGAAATGCCGAGCCTGACCCTCCAGTAAGACTCTTCC
AAATTCATGGAAATGACAAATCTAACACCAAAGCAGTGGAAAGTTCCAGCCTTTGCCTCCTCCCTAAACTCCAATG
ATGTCTTTCTGCTGCGAACTCAGGCAGAGCACTACCTGTGGTATGGCAAGGGGTCTAGTGGGGATGAGCGGGCAA
TGGCTAAGGAGCTGGCCAGCCTTCTCTGTGATGGCAGCGAGAACACTGTGGCCGAGGGCCAGGAGCCAGCCGAGT
TCTGGGACCTACTGGGAGGGAAAACCTCCATGCCAATGATAAAAGACTTCAGCAGGAAATCCTAGATGTCCAGT
CTCGTCTCTTTGAATGTTCCAATAAGACCGGCCAATTCGTTGTCACTGAGATCACAGACTTCACCCAGGATGACC
TGAACCCTACTGACGTGATGCTCCTAGATACCTGGGACCAGGTGTTCTTGTGGATTGGGGCTGAGGCCAATGCCA
CGGAGAAGGAGAGTGGCCTTGCCACAGCACAGCAGTACCTGCACACTCACCCAGCGGCCGAGATCCCGACACAC
CAATCCTGATCATTAAAGCAGGGGTTTGAGCCTCCCATCTTCACAGGCTGGTTCCTAGCCTGGGACCCTAACATTT
GGAGTGCAGGAAAAACATATGAACAATTAAAAAGAAGAGCTGGGAGATGCTGCTGCTATCATGCGAATCACTGCTG
ACATGAAGAATGCAACCCTCTCCCTGAATTCTAATGACAGTGAGCCAAAAATATTACCTATAGCAGTTCTGTTGA
AAAACCAGAATCAGGAGCTGCCTGAGGATGTAAACCCTGCCAAAAAGGAGAATTACCTCTCTGAACAGGACTTTG
TGTCTGTGTTTGGCATCACAAAGAGGGCAATTTGCAGCTCTGCCTGGCTGGAAACAGCTCCAAATGAAGAAAGAAA
AGGGGCTTTTCTAAAGCAAGAAGGCCCTATACCTATTGCAAGGCCACAGAAAAGAGCAGATAGTGCCAAATATCAGG
AAATAATTTATCCACCAATTTCTGCCTGACATTACAGCTACTTAATTTAGATATAATAGAGTCTGCAATACGGC
ATGTTCTCCATTTTTCTCATCCTTGCAATTCCTTGCTTGTATATACCTAAAAATGTTAACCATATAGTTTTTGGG
TTTTGTGGCCC

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FIGURE 3698

MPLTSAFRAVDNDPGIIVWRIEKMELALVPVSAHGNFYEGDCYVILSTRRVASLLSQDIHFWIGKDSSQDEQSCA
AIYTTQLDDYLGGSPVQHREYQYHESDTFRGYFKOGIIYKQGGVASGMKHVETNTYDVKRLHLHVKGKRNIRATEV
EMSWDSFNRGDVFLLDLGKVI IQWNGPESNSGERLKAMLLAKDIRDRERGGRAEIGVIEGDKEAASPMLMKVLQD
TLGRRSIIKPTVPDEIIDQKQKSTIMLYHISDSAGQLAVTEVATRPLVQDLLNHDDCYILDQSGTKIYVWKGKGA
TKAEKQAAMSKALGFIMKSYPSSTNVETVNDGAESAMFKQLFQKWSVKDQTMGLGKTFSIGKIAKVFQDKFDVT
LLHTKPEVAAQERMVDDGNGKVEVWRIENLELVPVEYQWYGGFFYGGDCYLVLYTYEVNGKPHHILYIWQGRHASQ
DELAASAYQAVEVDQRQFDGAAVQVRVRMGTEPRHFMAIFKGLVIFEGGTSRKGNAEPDPPVRLFQIHGNDKSNT
KAVEVPAFASSLNSNDVFLRLTQAEHYLWYGKSSGDERAMAKELASLLCDGSENTVAEGQEPAEFWDLLGGKTP
YANDKRLQQEILDVQSRLFEC SNKTGQFVTEITDFTQDDLNP TDVMLLD TDWQVFLWIGAEANATEKESALATA
QQYLHTHPSGRDPDTPILIIKQGFEPPIFTGWFLAWDPNIWSAGKTYEQLKEELGDAAAIMRITADMKNATLSLN
SNDSEPKYYPIAVLLKNQNELPEDVNP AKKENYLSEQDFVSVFGITRGQFAALPGWKQLQMKKEKGLF

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[illegible]

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FIGURE 3699B

ATAAAATGGAAGCAATTGCTCATGTTGGCCAAACATGGTGCACCGAGTGATTTCCATCTCTGGTAAAGTTACACT
TTTATTTTCCTGTATGTTGTACAATCAAAACACACTACTACCTCTTAAGTCCCAGTATACCTCATTTCATCTG
AAAAAAAAAGCTTGTGGCCAATGGAAACAGTAAGAACATCATAAAATTTTATATATATAGTTTATTTTGTGGGA
GATAAATTTTATAGGACTGTTCTTTGCTGTTGTTGGTCGCAGCTACATAAGACTGGACATTTAACTTTCTACCA
TTTCTGCAAGTTAGGTATGTTTGCAGGAGAAAAGTATCAAGACGTTTAACTGCAGTTGACTTTCTCCCTGTTCT
TTGAGTGTCTTCTAACTTTATTCTTTGTTCTTTATGTAGAATTGCTGTCTATGATTGTACTTTGAATCGCTTGCT
GTTGAAAATATTTCTCTAGTGTATTATCACTGTCTGTTCTGCACAATAAACATAACAGCCTCTGTGA

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FIGURE 3700

[illegible]

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FIGURE 3701

MVFRRFVEVGRVAYVSFGPHAGKLVAIVDVIDQNRALVDGFPCTQVRRQAMPFFKCMQLTDFILKFPHSARQKYVQQ
AWQKADINTKWAATRWAKKIEARERKAKMTDFDRFKVMKAKKTRNRIKNEVKKLQKAALLKASPKKAPGPKGTA
AAAAAAAAAKVPAKKMTAASKKASAQKVPAQKATGQKAAPAKPAQKGQKAPAKAPKASGKKA

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FIGURE 3702

GAACGCCTCTGTGTTTGAACAAACATTTCGAGTGGTAGGAGGACTCCTGTCTGCTCATCTGCTCTCCAAGAAGGC
TGGGGTGGAAGTAGAGGCTGGATGGCCCTGTTCCGGGCCTCTCCTGAGAAATGGCTGAGGAGGCGGCCGAAAAC
CCTCCCAGCCTTTTCAGACCCCCACTGGCATGCCATATGGAACAGTGAACCTTACTTCATGGCGTGAACCCAGGAGA
GACCCCTGTACCTGTACGGCAGGGATTGGGACCTTCATTGTTGAATTTGCCACCCTGAGCAGCCTCACTGGTGA
CCCGGTGTTTCGAAGATGTGGCCAGAGTGGCTTTGATGCGCCTCTGGGAGAGCCGGTCAGATATCGGGCTGAGTAT
AACAAAGCCATCCGGAACCTACACCCGCTTCGATGACTGGTACCTGTGGGTTTCAGATGTACAAGGGGACTGTGTCC
ATGCCAGTCTTCCAGTCCCTTGGAGGCCTACTGGCCTGGTCTTCAGAGCCTCATTGGAGACATTGACAATGCCATG
AGGACCTTCCTCAACTACTACACTGTATGGAAGCAGTTTGGGGGGCTCCCGGAATTCTACAACATTCCTCAGGGA
TACACAGTGGAGAAGCGAGAGGGCTACCCACTTCGGCCAGAATTATTGAAAGCGCAATGTACCTCTACCGTGCC
ACGGGGGATCCCACCCTCCTAGAACTCGGAAGAGATGCTGTGGAATCCATTGAAAAGCTGGACAACCGCATGGAG
TCGTTCTTCCTGGCCGAGACTGTGAAATACCTCTACCTCCTGTTTGACCCAACCAACTTCATCCACAACAATGGG
TCCACCTTCGACGCGGTGATCACCCCTATGGGGAGTGCATCCTGGG

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FIGURE 3703

MAEEAARKLLPAFQTPTGMPYGTVNLLHGVNPGETPVTCTAGIGTFIVEFATLSSLTGDPVFEDVARVALMRLWE
SRSDIGLSITKPSGTTTPASMTGTCGFRCTRGLCPQSSSPWRPTGLVFRASLETLTMP

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FIGURE 3704

CAAATTTTATCAAAGTTAATGGATCAGTTAGAAGCTCTAAAGAAGCAGTTGGGTGATAATGAAGCTATTACTCA
AGAAATAGTGGGCTGTGCCCATTTGGAGAATTATGCTTTGAAAATGTTTTTGTATGCAGACAATGAAGATCGTGC
TGGACGATTTACAAAAACATGATCAAGTCCTTCTATACTGCAAGTCTTTTGATAGATGTCATAACAGTATTTGG
AGAACTCACTGATGAAAATGTGAAACACAGGAAGTATGCCAGATGGAAGGCAACATACATCCATAATTGTTTAAA
GAATGGGGGAGACTCCTCAAGCAGGCCCTGTTGGAATTGAAGAAGATAATGATATTGAAGAAAATGAAGATGCTGG
AGCAGCCTCTCTGCCCACTCAGCCAACTCAGCCATCATCATCTTCAACTTATGACCCAAGCAACATGCCATCAGG
CAACTATACTGGAATACAGATTCTCTCCGGGTGCACACGCTCCAGCTAATACACCAGCAGAAGTGCCTCACAGCAC
AGGTGTAGCAAGTAATACTATCCAACCTACTCCACAGACTATACCTGCCATTGATCCCGCACTTTTCAATACAAT
TTCCCAGGGGGATGTTTCGTCTAACCCCAGAAGACTTTGCTAGAGCTCAGAAGTACTGCAAATATGCTGGCAGTGC
TTTGCAGTATGAAGATGTAAGCACTGCTGTCCAGAATCTACAAAAGGCTCTCAAGTTACTGACGACAGGCAGAGA
ATGAAGCCTTTGTATGACAGACCCATGTATTTTTGGCATGAGGAACTAACAGTCCATTACTCTATCTTCAGCCTA
TCAGGATCACATTTTCATTGTCCATTTACTAGATTCAATCGTCTCTGAGTATATAGGGCTGATGTTAGCAAGACC
CTAAAAATGTCCATTGAACCCTGCTTCAAAAAATGAAAACACACCTCTATAAAATGTTGTACTGGGAATAAGCTTT
GTATTTACATACATTAGGGGAATTTTTTAAAATCTGTAATGTTTGGACAAACAGATGATATTACTTTGCTATAAA
ATTATAAATGTAACTTTTAATAAAGATAGCCAGAATATTCTAAATTAGAAATTACGTTTTTGTTCCTCAAGAC
ATAAAACAAATATAAACATTCTAACTGCTGGATGAATCTGAAAAGACATTAAGTTCAAATTTAATTTATTCTC
ATATTAAATATAACTCCATTAAAAGTTTAAATTTTCATGGGAGAAAATATAATAAGGTAAAGAGGTAGAATCACT
TTCAGACTTAAGAATAATGTTGATTTCCCAAGTGCTTTACCTTATCTGTTAAAGCGTAAGATGAATTGGTATTTG
CTTCATAGGCAGTTTGACTGCATGTATTAGAGAAATGAAAAGAAGATATTTGTAGTAATGCCTGGAACTTGGTGC
TTTAAATTAAGGTACTCCTCTGCTGCTGTAGAATGGATTCCACACAGTGGATAGCTATGGGTGATTCAGAAATATT
ATGTTTAGATTCCCATTGTGTTAAGTTTATAAGTTTTGTGGGAATTATGAACCTACTGTGTACTACCTGCATTTG
TGCTGTGTGAAAAATAAATACAAGGATTCGTTTAGCTAA

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FIGURE 3705

GTGAGCGCCGGGCTCGGGGCCCCCGGCCGCCAGCCCTTCCCTTCCCTCCATCCCATCCCCTCCCCTCCCCC
CGGGCCCCGCGCCCCCCCCGCCCCGCCCCCCCCCATGGACATGCTGGACCCGGGTCTGGATCCCCTGCCTCGGC
CACCCTGCTGCCGCCGCCAGCCACGACAAGGGACCCGAGCGGAGGAGGGCGTTCGAGCTGCAGGAAGGCGGGGA
CGGCCCAGGAGCGGAGGAGCAGACAGCGGTGGCCATCACCAGCGTCCAGCAGGCGGGCGTTCGGCGACCACAACAT
CCAGTACCAGTTCCGCACAGAGACAAATGGAGGACAGGCTGTGATCCAAAATCCCTTCAGCAATGGTGCCAGTCC
GGCGGCCGAGGCTGTGAGCGGGGAGGCACGATTTGCCTATTTCCCAGCGTCCAGTGTGGGAGATACTACGGCTGT
GTCCGTACAGACCACAGACCAGAGCTTGCAGGCTGGAGGCCAGTTCTACGTCATGATGACGCCCCAGGATGTGCT
TCAGACAGGAACACAGAGGACGATCGCCCCCGGACACACCCCTTACTCTCCAAAAATTGATGGAACCAGAACACC
CCGAGATGAGAGGAGAAGAGCCCAGCACAAACGAAGTGGAGCGGAGGCGGAGGGACAAGATCAACAACCTGGATCGT
CCAGCTTTCGAAAATCATTCCAGACTGTAACGCAGACAACAGCAAGACGGGAGCGAGTAAAGGAGGGATCCTGTC
CAAGGCCTGCGATTACATCCGGGAGTTGCGCCAGACCAACCAGCGCATGCAGGAGACCTTCAAAGAGGCCGAGCG
GCTGCAGATGGACAACGAGCTCCTGAGGCAGCAGATCGAGGAGCTGAAGAATGAGAACGCCCTGCTTCGAGCCCA
GCTGCAGCAGCACAACTGGAGATGGTGGGCGAGGGCACCCGGCAGTGACGCCCCGCCACCACCACGCAGCCGCGG
CCGCCCACGCCGGCCTCTGCTGCCCCCTTCCCCAGCCCTTAGCACAGAGAGGGACACATGCCCCTCCCCAGCTG
CGTTTTTTTTATAGTAGATTTTTTAACAAAAACGGGGAGAAATAATGCATTTCTGTGGATACAGTGCCCAACGCCC
TCCTCCACTTGGAACGGTATCCTCCCTGCCCATCCGTCTGTCTGTGCGCCCTTCTCCCGGCCCTCACTAAGCCCC
GGCACTTCTAGTGGTCTCACCTGGAGGCAAGAGGGAGGGGACAGAGGCCCTGCCACGTCCCGCTGCCTCCTGCTC
TCTGGAGGTAAGTACAGACAGGGTGCTGATGGGAAGGAGGGGAGCCTTTGGGGGGCCACCCGGGGCCTGGACCTATG
CAGGGAGGCCACGTCCCACCCACCTCTTGTTTTCTGGGTCCCTGCTCCCCTTTGGGGGTGTGTGTGTGTGTTTTA
ATTTTCTTTATGGAATAATTGAC

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FIGURE 3706

MDMLDPGLDPAASATAAAAAASHDKGPEAEEGVELQEGGDGPGAEEQTAVAITSVQQAAGFDHNIQYQFRTETNGG
QAVIQNPFSNGGSPAEEAVSGEARFAYFPASSVGDTTAVSVQTTDQSLQAGGQFYVMMTPQDVLQTGTQRTIAPR
THPYSPKIDGTRTPRDERRRAQHNEVERRRRDKINNWIVQLSKIIPDCNADNSKTGASKGGILSKACDYIRELRQ
TNQRMQETFKEAERLQMDNELLRQQIEELKNENALLRAQLQQHNLEMVGEGTRQ

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FIGURE 3707

CGATTGTTGGTGACAGCGAAAGAACGATAACAAAATGCCGGAGCGAGATAGTGAGCCGTTCTCCAACCCTTTGGC
CCCCGATGGCCACGATGTGGATGATCCTCACTCCTTCCACCAATCAAACTCACCATGAAGACTTCAGGAACT
TCTCATGACCCCCAGGGCTGCACCTACCTCTGCACCACCTTCTAAGTCACGTCACCATGAGATGCCAAGGGAGTA
CAATGAGGATGAAGACCCAGCTGCACGAAGGAGGAAAAAGAAAAGTTATTATGCCAAGCTACGCCAACAAAGAAAT
TGAGAGAGAGAGAGAGCTAGCAGAGAAGTACCGGGATCGTGCCAAGGAACGGAGAGATGGAGTGAACAAAGATTA
TGAAGAAACCGAGCTTATCAGCACCACAGCTAACTATAGGGCTGTTGGCCCCACTGCTGAGGCGGACAAATCAGC
TGCAGAGAAGAGAAGACAGTTGATCCAGGAGTCAAATTCTTGGGTGGTGACATGGAACACACCCATTTGGTGAA
AGGCTTGGATTTTGTCTGTCTTCAAAGGTACGAGCTGAGATTGCCAGCAAAGAGAAAGAGGAAGAGGAAGTATGAT
GGAAAAGCCCCAGAAAGAAACCAAGAAAGATGAGGATCCTGAAAATAAAATTGAATTTAAAACACGTCTGGGCCG
CAATGTTTACCGAATGCTTTTTAAGAGCAAAGCATATGAGCGGAATGAGTTGTTCTCGCCGGGCGCATGGCTAG
TGTGGTAGACCTGGATGATGAGTATGCTGACACAGATATCCCCACCCTCTTATCCGCAGCAAGGCTGATTGCC
CACCATGGAGGCCAGACCACACTGACCACAAATGACATTGTCATTAGCAAGCTGACCCAGATCCTTTCATACCT
GAGGCAGGGAACCCGTAACAAGAAGCTTAAGAAGAAGGATAAAGGGAAGCTGGAAGAGAAGAAACCTCCTGAGGC
TGACATGAATATTTTGAAGACATTGGGGATTACGTACCCTCCACAACCAAGACACCTCGGGACAAGGAGCGGGA
GAGATATCGGGAACGGGAGCGTGATCGGGAAAGAGACAGAGACCGTGACCGAGAGCGAGAGCGAGAACGAGATCG
GGAACGAGAGCGAGAGCGGGACCGAGAGAGAGAAGAGGAAAAGAAGAGACACAGCTACTTTGAGAAGCCAAAAGT
AGATGATGAGCCCATGGACGTTGACAAAGGACCTGGGTCTACCAAGGAGTTGATCAAGTCCATCAATGAAAAGTT
TGCTGGGTCTGCTGGCTGGGAAGGCACAGAATCGCTGAAGAAGCCAGAAGACAAAAAGCAGCTGGGAGATTTCTT
TGGCATGTCCAACAGTTATGCAGAGTGCTACCCAGCCACGATGGATGACATGGCTGTGGATAGTGATGAGGAGGT
GGATTATAGCAAAATGGACCAGGGTAACAAGAAGGGGCCCTTAGGCCGTTGGGACTTTGATACCCAGGAAGAATA
CAGCGAGTATATGAACAACAAAGAAGCTTTGCCCAAGGCTGCATTCCAGTATGGTATCAAAATGTCTGAAGGGCG
GAAAACAGGCGCTTCAAGGAAACCAATGACAAAGCAGAGCTTGATCGCCAGTGGAAGAAGATTAGTGCAATCAT
TGAGAAGAGGAAGAAGATGGAAGCTGATGGGGTTGAAGTCAAAAGACCAAAATACTAATCACTAGTTACAACCAG
AGATGCTCCACAAGGATATGCTCCCCACTGTTTTCTTTCTACAATTTCCAAAGGTTGCAAGATGTTTTTTGTGG
ATGAATATAAAATTTTATTGTGTAATTACTTGGTTCCATTAAAATTGGTTAACTTGC

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FIGURE 3708

GCTGGATGGGGAGAGCTGTATGGACGCTCAGGCTACAAC TATTTTTCTCAGGGGGTGCAGATGATGCCTGGGCA
GATGTGGAGGACGTACGGAGGAGGACTGTGCTCTTCGAAGTGGTGACACGCATCTTTTGATAAGGTCAGAGGC
TATGACATCAAGCTGCTTCGATACCTGTCAGTCAAATACATCTGTGACCTGATGGTGGAGAACAAGAAGGTGAAG
TTTGGCATGAATGTAACTCCTCTGAGAAGGTGGACAAAGCCCAGCGCTATGCCGACTTCACTCTCCTCTCCATC
CCGTATCCAGGCTGTGAATTTTTCAAGGAATATAAAGATCGGGATTACATGGCAGAAGGGCTCATATTTAACTGG
AAGCAGGACTACGTTGATGCCCCATTGAGCATCCCCGACTTCTGACTCACTCTCTGAACATTGACTGGAGCCAG
TATCAGTGTGGGATCTGGTGCAACAAACACAAAAC TACCTGAAGCTGCTGCTTTCCTTAGTTAACAGTGATGAT
GACAGCGGGCTGCTGGTACACTGTATCTCAGGCTGGGATCGGACCCCCCTCTTCATCTCCCTCCTGCGCCTTCC
TTGTGGGCTGATGGGCTCATCCACACGTCCCTGAAGCCCAGTGAATCCTCTACCTCACTGTGGCCTATGACTGG
TTCCTCTTCGGGCACATGTTGGTAGATCGGCTCAGCAAAGGGGAGGAGATTTTCTTCTCTGCTTCAATTTTTTG
AAGCATATTACCTCCGAGGAGTTCTCTGCTCTGAAGACCCAGAGGAGGAAGAGTTTGCCAGCCCGGGATGGAGGC
TTCACCCCTGGAAGACATCTGCATGCTGAGACGAAAGGACCGTGGCAGCACACCAGCCTTGGCAGCGACTTCTCC
CTGGTCAATGGAGAGTTCCCCAGGAGCCACTGGGAGCTTACCTATGAGGCCGTGGAGCTGGTCCCAGCAGGAGCG
CCAAC T CAGGCAGCTTGGCTTGCAGCCCTGAGTGATCGAGAGACTCGCTGCAGGAGGTGCGCTCAGCCTTCTTGG
CTGCGTACAGCAGCACAGTGGGGCTTCGGGCAGTAGCCCCCAGTCCCTCCGGTGCCATCGGGGGCCTGCTGGAGC
AATTTGCCCGTGGTGTGGACTCCGGAGCATCAGCAGCAATGCCTTGTGAAGAAGCCAGCCCATGACATTTTCCT
GCTCCTCTCTCAGCTGAGCCCTTAGCAGAGAA TCAAAGCCATGCCTGGCCGAAGGGGTACTTCCAGGTCAGGGGA
AATTT CAGTCCCCCATCTCCATCATGAACATGGCAGCCCCAAAGCTGAGCAAGGCCAAAGACAGGGTTTTCCAAC
CCCCAGCCTCTTGACTGGTGACCACCACCCCTTCTTGTCACTGTCTCCACCCACCCCATCTTTGCTGGGATTCC
CATCAACTCTCAGAACTGTGTGGGGTTTCCCTGGGGCCTTGTGGAAGCCATGACTTCACAAAGACCCTACCTGTC
AGTTCTTGTTTCTGGGGAGGAGGGATCACCTGCACTGAGAATGAGGCAGTTTGACACAGATCACAAAATAAAATC
AAAGTCTTTTTG

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FIGURE 3709

MVENKKVKFGMNVTSSEKVDKAQRYADFTLLSIPYPGCEFFKEYKDRDYMAEGLIFNWKQDYVDAPLSIPDFLTH
SLNIDWSQYQCWDLVQQTQNYLKLLLSLVNSDDDSGLLVHCISGWDRTPLFISLLRLSLWADGLIHTSLKPTEIL
YLTVAIDWFLFGHMLVDRLSKGEEIFFFCFNFLKHITSEEFSAKKTQRRKSLPARDGGFTLEDICMLRRKDRGST
TSLGSDFSLVMESSPGATGSFTYEAVELVPAGAPTQAAWLAALSDRETRCRRCAQPSWLRTAAQWGFQ

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FIGURE 3710

ACGAGAAGTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAAT
TGCAAACATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAAGTAG
AAAATCAATAAAATTACAGCAAAATAGATGATTCCCTAATGAATTGGAAAACTGATCAGTCAAATACAGCCAGA
GGTGGACCGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATAT
AATGATGCTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATT
TAAGATCGATGAAGAAATTGGTAACAAATTCGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAA
AAGAGGTCACAAGGTGCTGCTTTTTTTCACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAG
AGATTTCAACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAACATGCACAGCTTCAACAC
GGATCCAGAGGTGTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATAC
AGTTATCATTTATGATAGTGATTGGAACCCCCAGTCGGATCTTCAGGCCCAGGATAGATGTCATAGAATTGGTCA
GACAAAGCCAGTTGTTGTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAAGAGCAGCTGC
TAAAAGGAACTGGAAAAGTTGATCATCCATAAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAA
GAATTTCTTAGATCCTAAGGAATTAATGGAATTATTAAATCTAGAGATTATGAAAGGGAAATAAAAGGATCAAG
AGAGAAGGTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTC
AGGACCAATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATTCTGAAGATTCCAGTCCTGAATGTTTGTT
TTAAGTGGAGCTCAAGAATAGCTTTTAAAGTTCTTATTTACATCTAGTGATTTCCTGTATTGGGTTTGAAAT
ACTGATTGTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAAGTACTAGTACCATGCGTACTTAAATAGATGGT
AATTTTCTGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAG
TAGTATTCTTGGATACAGGCTGATGTGTACTTAACCACTTCCAGATTTATACAGTCTTCCTGTGGAAGTTTAGTA
AATGTCTTTTTCCCTCCTTTCTTCTAGTAATGCAGTTCATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTT
CATGGGGAGAGATTGGGATTATGCTCTCTGTTGTTTAAAGAACTGTTTGATTTTAGAGTCTATTTCTATGAGATA
GTTTACCAAATAAATGTTTCCTTATAAG

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FIGURE 3711

MFGSSEKETIELSPTGRPKRRTRKSINYSKIDDFPNELEKLISQIQPEVDRERAVVEVNIPVESEVNLKLQNIMM
LLRKCCNHPYLI EYPIDPVTQEFKIDEELVTNSGKFLIILDRMLPELKKRGHKVLLFSQMTSMLDILMDYCHLRDF
NFSRLDGSMYSEREKNMHSFNTDPEVFIFLVSTRAGGLGINLTAADTVIIYSDWNPQSDLQAQDRCHRIGQTK
PVVVYRLVTANTIDQKIVERAAAKRKLEKLIHKNHFKGGQSGNLNLSKNFLDPKELMELLKSRDYEREIKGSREK
VISDKDLELLLDRLIDQMNASGPIKEKMGIFKILENSEDSSPECLF

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FIGURE 3712

ACTTCCGGTCGGCGTGAGCGTGAGGTGTGGGTGTTTCGTTTCTCAGGTAAAACATGGCTAAAAGCTTACGGAGTAA
GTGGAAAAGAAAGATGCGTGCTGAAAAGAGAAAAAAGAATGCCCCAAAGGAGGCCAGCAGGCTTAAAAGTATTCT
CAAAC TAGACGGTGATGTTTTAATGAAAGATGTTCAAGAGATAGCAACTGTGGTGGTACCCAAACCCAAACATTG
CCAAGAGAAAATGCAATGTGAGGTAAAAGATGAAAAAGATGACATGAAAATGGAGACTGATATTAAGAGAAACAA
AAAGACTCTTCTAGACCAGCATGGACAGTACCCAATATGGATGAACCAAAGGCAAAGAAAAAGGCTGAAGGCAAA
GCGAGAGAAAAGAAAGGGGAAAAGCAAAGCAAAGCAGTGAAAGTGGCAAAGGGTTTGGCCTGGTAGACTCTTAA
AACCTTGGAATGCCACATGGGATAGATGACGGATTAGAATGTATACACATGTATACTTTGATTTCAACTGCCA
CCAAATGAAAACCATTTGTTTTCTATTTTAACTTGGCCTTTTTTCTTCAATTCAAACCCAGCATAACTCCTCAA
GTTTGTGTTTGGGAACCTTGAATAAAATATTTTCTTTGATACATCCAAGCTCTACTGATACTTTAACTGGATGCTAC
CCAATATCCAGTTATAATCAGGCCTCAACGTTCTGTCAGGTATTAATATGGTTAGAATTGTTCTTACAACCTGGTA
ATTATAGTCAATAGAGATAAAACAGATGATGTACTGACAAATTTTGTGAACTTAGATTTTAAAGAAAGTTGTTG
TATAATCATATCATTTAAAAATACTACATTAGGGCTGGGCATGGTGGCTCACACCTGTAATCCCAGCACTTTGGG
AGGCCGAGGCAGGTGGATCACGAGGTCAGTTCGAGACTAGCCTGGCTAATACAGTGAAACCCCATCTCTACTAAA
AATACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3713

MAKSLRSKWKRKMRAEKRKKNAPKEASRLKSILKLDGDVLMKDVQEIATVVVPPKPKHCQEKMQCEVKDEKDDMKM
ETDIKRNNKTLDDQHGGQYPIWMNQQRKRLKAKREKRKGKSKAKAVKVAKGLAW

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FIGURE 3714A

GGGAGCGAGTGC GGAGCGAGTGGGAGCGAGACGGCCCTGAGTGGAAAGTGTCTGGCTCCCCGTAGAGGCCCTTCTG
TACGCCCCGCCGCCCATGAGCTCGTTCTCACGCGAACAGCGCCGTCGTTAGGCTGGCTCTGTAGCCTCGGCTTAC
CCCGGGACAGGCCACGCCTCGCCAGGGAGGGGGCAGCCCGTCGAGGCGCCTCCCTAGTCAGCGTCGGCGTCGCG
CTGCGACCCTGGAAGCGGGAGCCGCCGCGAGCGAGAGGAGGAGCTCCAGTGGCGGGCGGCGGGCGGCAGCGGCA
GCGGGCAGCAGCTCCAGCAGCGCCAGCAGGCGGGATCGAGGCCGTCAACATGGCGAGCGCCTCGTACCACATTTC
CAATTTGCTGGAAAAATGACATCCAGCGACAAGGACTTTAGGTTTATGGCTACAAATGATTTGATGACGGAAC
GCAGAAAGATTCCATCAAGTTGGATGATGATAGTGAAGGAAAGTAGTGAAAATGATTTTGAAGTTATTGGAAGA
TAAAAATGGAGAGGTACAGAAATTTAGCTGTCAAATGCTTGGTCCTTTAGTGAGTAAAGTGAAAGAATACCAAGT
AGAGACAATTGTAGATACCCTCTGCACTAACATGCTTTCTGATAAAGAACAACCTTCGAGACATTTCAAGTATTGG
TCTTAAACAGTAATTGGAGAACTTCTCCAGCTTCCAGTGGCTCTGCATTAGCTGCTAATGTATGTAAAAAGAT
TACTGGACGTCTTACAAGTGCAATAGCAAAACAGGAAGATGTCTCTGTTTCAAGCTTAGAAGCCTTGGATATTATGGC
TGATATGTTGAGCAGGCAAGGAGGACTTCTTGTTAATTTCCATCCTTCAATTCTGACCTGTCTACTTCCCCAGTT
GACCAGCCCTAGACTTGCAGTGAGGAAAAGAACCATTATCGTCTTGGCCATCTGTTATGAGCTGTGGAATAT
AGTTTTTGTAGATCTTATTGAACATCTGTTGTGTCAGAGTTGTCCAAAAATGATTCTATGTCAACAACAAGAACCTA
CATACAATGTATTGCTGCTATTAGTAGGCAAGCTGGTCATAGAATAGGTGAATACCTTGAGAAGATAAATCTCTT
GGTGGTAAAATTTTGCAATGTAGATGATGATGAATTAAGAGAGTACTGTATTCAAGCCTTTGAATCATTGTAAAG
AAGATGTCCTAAGGAAGTATATCCTCATGTTTCTACCATTATAAATATTTGTCTTAAATATCTTACCTATGATCC
AAATTATAATTACGATGATGAAGATGAAGATGAAAATGCAATGGATGCTGATGGTGGTGATGATGATCAAGG
GAGTGATGATGAATACAGTGATGATGATGACATGAGTTGGAAAGTGAGACGTGCAGCTGCGAAGTGCTTGGATGC
TGATGTTAGCACAAAGGCATGAAATGCTTCCAGAATTCTACAAGACCGTCTCTCTGCACTAATATCCAGATTTAA
AGAGCGTGAAGAGAATGTAAAGGCAGATGTTTTTACGCATACCTTTCTCTTTGAAGCAAACTCGTCTGTACAA
AAGTTGGCTATGTGACCTGATGCAATGGAGCAGGAGAAACACCTTTAACAATGCTTCAGAGTCAGGTTCCCAA
CATTGTTAAAGCTCTTACAAACAGATGAAAGAAAAAGTGTGAAGACCCGACAGTGTGTTTTAACATGTTAAC
TGAGCTGGTAAATATTACCTGGGGCCCTAACTCAACACATTCTGTACTTGTACCAGGAATCATTTTCTCACT
GAATGATAAATCAAGCTCATCGAATTTGAAGATCGATGCTTTGTGATGCTATACGTAATCCTCTGTAACCATT
TCTCAAGTCTTCCATCCTCAGTTCAGGCTTTGGTTCCTCCAGTGGTGGCTTGTTGGAGACCCATTTTACAA
AATTACATCTGAAGCACTTCTTGTACTCAACAGCTTGTCAAAGTAATTCGTCCTTTAGATCAGCCTTCTCGTT
TGATGCAACTCCTTATATCAAAGATCTATTTACCTGTACCATTAAAGAGATTAAAGCAGCTGACATTGATCAGGA
AGTCAAGGAAAGGGCTATTTCTGTATGGGACAAATATTGCAACCTTGGAGACAATTTGGGTCTGACTTGCC
TAATACACTTCAGATTTTCTTGGAGAGACTAAAGAATGAAATACCAGGTTAACTACAGTAAAGGCATTGACACT
GATTGCTGGGTACCTTTGAAGATAGATTTGAGGCCTGTTCTGGGAGAAGGGGTTCCCTATCCTTGCTTCATTCT
TAGAAAAAACAGAGAGCTTTGAACTGGGTACTCTTCTGCCCTTGATATTCTAATAAAAAACTATAGTGACAG
CTTGACAGCTGCCATGATTGATGCAGTTCTAGATGAGCTCCACCTCTTATCAGCGAAAGTGATATGCATGTTTC
ACAAATGGCCATCAGTTTTCTTACCCTTTGGCAAAAGTATATCCCTCCTCCCTTTCAAAGATAAGTGGATCCAT
TCTCAATGAACCTATTGGACTTGTGAGATCACCTTATTGCAGGGGGGAGCTCTTAGTGCCATGCTAGACTTTTT
CCAAGCTCTGGTTGTCACTGGAACAAATAATTTAGGATACATGGATTTGTTGCGCATGCTGACTGGTCCAGTTTA
CTCTCAGAGCACAGCTCTTACTCATAAGCAGTCTTATTATTCCATTGCCAAATGTGTAGCTGCCCTTACTCGAGC
ATGCCCTAAAGAGGGACCAGCTGTAGTAGGTGAGTTTATTCAAGATGTCAAGAACTCAAGGTCTACAGATTCCAT
TCGTCCTTAGCTCTACTTTCTCTTGGAGAAGTTGGGCATCATATTGACTTAAGTGACAGTTGGAACATAAATC
TGTAATACTAGAAGCTTTCTCATCTCCTAGTGAAGAAGTCAAATCAGCTGCATCCTATGCATTAGGCAGCATTAG
TGTGGGCAACCTTCTGAAATATCTGCCGTTTGTCTGCAAGAAATAACTAGTCAACCCAAAAGGCAGTATCTTT
ACTTCATTCTTGAAGGAAATATTAGCTCTGCATCAGTGGTGGGCCTTAAACCATATGTTGAAAACATCTGGGC
CTTATTACTAAAGCACTGTGAGTGTGAGAGGAAGGAACCAGAAATGTTGTTGCTGAATGTCTAGGAAAACCTCAC
TCTAATTGATCCAGAACTCTCCTTCCACGGCTTAAGGGTACTTGATATCAGGCTCATCATATGCCCGAAGCTC
AGTGGTTACGGCTGTGAAATTTACAATTTCTGACCATCCACAACCTATTGATCCACTGTAAAGAACTGCATAGG
TGATTTCTTAAAACTTTGGAAGACCCAGATTTGAATGTGAGAAGAGTAGCCTTGGTCACATTTAATTCAGCAGC
ACATAACAAGCCATCATTAATAAGGGATCTATTGGATACTGTTCTTCCACATCTTACAATGAAACAAAAGTTAG
AAAGGAGCTTATAAGAGAGGTAGAAATGGGTCCATTTAAACATACGGTTGATGATGGTCTGGATATTAGAAAGGC

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FIGURE 3714B

AGCATTGAGTGTATGTACACACTTCTAGACAGTTGTCTTGATAGACTTGATATCTTTGAATTTCTAAATCATGT
TGAAGATGGTTTGAAGGACCATTATGATATTAAGATGCTGACATTTTAAATGTTGGTGAGACTGTCTACCCCTTG
TCCAAGTGCAGTACTGCAGAGGTTGGACCGACTTGTGAGCCATTACGTGCAACATGTACAATAAGGTAAAGGC
AAACTCAGTAAAGCAGGAGTTTGA AAAACAAGATGAATTAAGCGATCTGCCATGAGAGCAGTAGCAGCACTGCT
AACCATTCCAGAAGCAGAGAAGAGTCCACTGATGAGTGAATTCAGTCACAGATCAGTTCTAACCCCTGAGCTGGC
GGCTATCTTTGAAAGTATCCAGAAAGATTTCATCATCTACTAACTTGGGAATCAATGGACACTAGTTAGATGTTTGT
TCACCATGGGGACCATTACATATGACCATACAATGCACTGAATTGACAGGTTAATCATAAGACATGGAAAGAGAA
GTGTCTAAAAGCTTCAAATGTTCCACTTTTTTTTCCCTTCATGGAGACTGTTTGTGTTGGCTTTCTTCCATTGTTG
TTTTGTAGCATTTATTTTCAAAAATGTGTATTTCCATAATCCAGAGGTTGTA AAACCACTAGTGTTTTAGTGTT
ACAGCAACATTTGAAATGGAACTAAAAGTTAGGATTTTATGGAGTATGGAGATAGGGTCCAGTATCTATTTACC
CTGTAATGTTTAGGATTA AAATGTTAAATTTTGTGACCATGAATTTCTTCTTTTATAAAATTTCTCATTTAAA
AATCAAAAATCTTGCAAAACAAAACCATGTTTCTTTTCTTGTATAACTTTTGTTTTTCAGCAACATAAATTGA
TTTTTAGCTGGCAGACAAGAATATCCATATAAGATTGTTAACCATTTCAGAGAGTTTGGCAATTTTAAAAGAT
AATAAGGTATCATTTTAAAGTATGAAAATTAACAATATCCCTGTTGCGCACACTAATTTTGCA TGAGTAAGTTA
CAAATATGTATCGTCTGTAAAGCAGCATGTGCAGATTATTCATAATATAGAAGTTAAAATAAGTATTAGTGCAAT
TTTCAGATATTTATTTTGCACAGAAAACACATTATCTGGAGAGAAAGAAAGGAGAATTTTGGAGACTTGGGTTT
TCTTAATGCCAGTGTGAATTTGCAGATGTTTTCA GAAAATCAAGTCACAGTAACAATTTGCCACTTTTTCTATT
ATAAATCTTCTTACTTAAATTTTGAATATTTAGTTTTTCTCAGTTACCCATTGTGTGTGTGTGATTCCACTTAG
AAATTCCTTAAAACCAGATTTTTCTTTCATTCCGTTTGGATGTCTACATTCCTTATCAAAGGATATAAATACTGTG
TATGCTTTTGAATTTTATTTT TAGGAAAATCTGAAGCCAGCTATCACAGGTTTGTAGCTAATAATAGTATTTT
CTTTTAGTTGAGTTAGGTTTTTCCCCATCTCCTGTAGAGCGAATTTACATATTGTATTGGGTAAGTGTTCACTAC
TTTTCTGATTAAGGGATCTGTGCTGGGGAACAAAGCTTTTGCAGTACCTTATATTGTAGTTAAAATTTTATTTA
ACATATCCTTCAGTGAGCTCATTTACACTGTAGCCTCTTCCTTAAAATTTGTGGTGCTCCTGTAACAGTAAGAA
CTAATTTCTGAAATAAAAGACATCTCCTAATGCTGTGCAAACATAGTTTACATGTATTGAAGGAGGCAGTTGTTAA
ATTGAGTGACCAATTTAAGCAATCAGATATTTGAAAAC TGACCCTTTAGTTTTGAACTGTGAATTAGAAACAC
TTTTCTGCTGTATTACTACCTGCTTTAACATCCAAATATACAGTGATTTTAAATGATAACATACTGTGGTTATT
AGATTAAACAGCTTGATTTTGAATGTTT CAGATGATAATGCAGAAGACATCACTTCTAGTAAGGATTTTGACTAGTG
CATTGATGTTGAAGTTGGTGCCATTTCAAATGTGGCAGGTGATAATCTTTTACCATAATTTGCATAAAACTGTA
ATAGAAGTTTATTTTGAAGTGTAGTATATTATGTACTATGCATTTCTGTGGTATAGATGTTGTGGATATATTTA
AGTATTTGGTTACATGGTTTTTACAATAAATTACAATACTGCAGGC

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FIGURE 3715

CTGGCTTACAGGGCGGCGGGGGTGTGTGTCCTCTGTAAAGAGTGCTACTCGCCCGGGGTGATCTGTGCATGC
CACTCCTGGGTGACAGCGGTGAGGTGCGCGTCTGCGAGGACGCGCGGTGGAGTAGAAGGGCAGCCGGAGACAGGC
CCGGCGCCCCCTTCCGAGGCTAGACGGCCCCAGCTTCGCGGGGATCATGGCATTGCTGGTGGACCGAGTGCGGGGC
CACTGGCGAATCGCCGCGGGGCTCCTGTTCAACCTGCTGGTGTCCATCTGCATTGTGTTCTCAACAAATGGATT
TATGTGTACCACGGCTTCCCCAACATGAGCCTGACCCTGGTGCACCTTCGTGGTCACTGGCTGGGCTTGTATATC
TGCCAGAAGCTGGACATCTTTGCCCCAAAAGTCTGCCGCCCTCCAGGCTCCTCCTCCTGGCCCTCAGCTTCTGT
GGCTTTGTGGTCTTCACTAACCTTTCTCTGCAGAACAAACACCATAGGCACCTATCAGCTGGCCAAGGCCATGACC
ACGCCGGTGATCATAGCCATCCAGACCTTCTGCTACCAGAAAACCTTCTCCACCAGAATCCAGCTCACGCTGATT
CCTATAACTTTAGGTGTAATCCTAAATTCTTATTACGATGTGAAGTTTAAATTTCTTTGGAATGGTGTGTTGCTGCT
CTTGGTGTGTTTAGTTACATCCCTTTATCAAGTGTGGGTAGGAGCCAAACAGCATGAATTACAAGTGAACCTCAATG
CAGCTGCTGTACTACCAGGCTCCGATGTCTGCCATGTTGCTGGTGTGCTGTGCCCTTCTTTGAGCCAGTGTGTT
GGAGAAGGAGGAATATTTGGTCCCTGXX
XXTATAACATGTTCCGACACTTCAAG
TTCTGCATTACTTTATTCGGAGGATATGTTTTATTTAAGGATCCACTGTCCATTAATCAGGCCCTTGGCATTGTTA
TGTACATTATTTGGCATTCTCGCCTATACCCACTTTAAGCTCAGTGAACAGGAAGGAAGTAGGAGTAACTGGCA
CAACGTCCTTAATTGGGTTTTTGTGGAGAAAAGAATGTTGTCCCAAGAAGATAAAAAATATTGTTAAGTGTGCAA
GTTATTAAAAAATAAATTGGGCCAGGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCC
AGCGGATCACTTGAGGTCAGGAGTTCGAGACCAGCCTGACCAACATGGAGAAACCCTGTCTCACTAATAATACA
AAATTAGCCAGGCGTGGTGGCGCATGCCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAAC
CCGGGAGGCGGCGGTTGCAGTGAGCCGAGATCGTACCATTGCACTCCAGCCTGGGCAACAAGAGCGAACTCCAT
TTCAAAAAAATAAATTGGTGACAGACTCAATGATGGAATGATTTGTGGAATTAACACAAAGCAGATTTTATTC
ATATAATGACTTTTTTTTAAAGAGTCTCTTTTAAAAAACTTAATTCTCTAAAACCGAAATGGTTCATGCTTCT
TTTTAAAAATGATTGTATAAAATGTATGGAATGGTTAGCCTGGTGTGGTGGTGCACACCTGTAATCCCAGCTACT
TGGGAGACTGAGACATGAGAA TCCTTGAGCCTGGGAGGCGGAGGTTGCAATGAGCCAAGATCGTACCACTGCAC
TCCAGCCTGGGCGACAGAGCAAGACACTGTCTCTCTCTCTCTCTCCATATATATATGTGTGTGTGTATATATA
TATATATGTGTGTGTGTGTGTGTATACATATATACACATATATACACACACATACATATACATGTGTATAT
ATATACCATCCATATATATATGTGGGATATATATATATATATATATATATGGATATGGTTATATATATGGGAATGGTTG
GGGTTGGTCCCAGCTGAGTATAGACAATTAAATTACGTGATAA

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FIGURE 3716

MQLLYYQAPMSSAMLLVAVPFFEPVFGEGGIFGPWSVSALLMVLLSGVIAFMVNLSIYWIIIGNTSPVTYNMFGHF
KFCITLFGGYVLFKDPLSINQALGILCTLFGILAYTHFKLSEQEGSRSKLAQRP

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FIGURE 3717

GTTTTAGGGACAGACTGCTTCCGGGTCTGAAGGGCTTGCTTCCGGAGAGCGGGAAGGCTAAAACGCGGTAGCTAAA
CTGCAGCCAACCTTTGGTTGTGTGTGGAAGGCTTTAGCCATGGACAGGAGTGGCTTTGGAGAGATATCATCCCC
TGTAATCCGGGAGGCAGAGGTGACACGGACTGCACGGAAACAGAGTGCTCAGAAAAGAGTTTTACTTCAGGCATC
TCAAGATGAAAATTTTGGTAATACTACACCAAGAAACCAGGTTATCCCTCGAACTCCTAGCTCATTTGACAGCC
TTTTACCCCAACAAGCCGAAGCTTACTAAGGCAGCCAGATATTTCTGCATTCTTGGAACAGGAGGGAAGTCGCC
CCGACTTACGCAGTCTTCAGGGTTCTTTGGAAATCTCTCCATGGTTACTAATCTGGATGACAGTAACTGGGCAGC
TGCATTTTCATCACAGCGTTCCGGGCTGTTACAAACACAGAGCCCCACAGTATAACAGAAGATGTAACATATCAG
TGCTGTTATGTTACGTGAGGATGATCCTGGAGAAGCTGCATCCATGAGTATGTTTTCTGATTTCTGCAGTCTTT
TCTGAAGCACTCTTCGAGTACAGTTTTTGATCTTGTGGAAGAGTATGAAAACATCTGTGGTAGTCAGGTGAATAT
ACTGAGTAAAATAGTGAGTCGAGCAACACCTGGACTTCAAAAATTTTCAAAAACAGCCAGTATGCTCTGGCTTCT
TCAACAGGAGATGGTCACATGGAGGCTGCTGGCTTCTTTGTATAGAGACAGAATACAGTCTGCATTAGAAGAGGA
AAGTGTATTTCGAGTTACTGCTGTTAATGCCAGTGAAAAACAGTTGTGGAAGCGTTATTTAGAGGGATTCACT
TGTTCCGACAAAGTCAGCTGGTGGTAGATTGGTTAGAGAGTATTGCCAAAGATGAAATTGGAGAATTTTCTGATAA
TATTGAGTTTTATGCAAAATCAGTATATTGGGAAAATACTCTGCATACCTTAAACAACGGCAGCTGACTTCTTA
CGTTGGAAGTGTTTCGTCGCTTGTCACTGAATTGGACCTGATGCTCCCATAGACAGAAAATGCCCTTGATGA
TCTGGATAGAGAAGATGAAGTTAGATTACTCAAATATCTCTTACTCTAATCCGTGCTGGAATGACAGAAAGAGGC
ACAACGACTCTGTAAACGCTGTGGTCAAGCATGGAGAGCTGCAACACTGAAGGCTGGAAACTGTACCATGACCC
TAATGTTAATGGAGGAACAGAAATTAGAACCTGTTGAAGGGAATCCATATAGACGCATTGGGAAAATAAGTTGCTG
GAGAATGGCAGAAGATGAGCTTTTTAATAGATACGAGAGAGCAATTTATGCAGCTTTAAGTGGGAATCTTAAGCA
GCTGCTTCTGTCTGTGACACCTGGGAAGACACAGTTTGGGCCTACTTCCGGGTGATGGTGGACAGTCTGGTAGA
ACAGGAGATCCAGACATCAGTAGCAACTCTGGATGAACTGAAGAACTCCCTAGAGAATATCTGGGAGCAAACTG
GACGTTAGAAAAGGTTTTTGGAGAACTTCAAGCTACTGACAAAAGAGAGTTCTGGAAGAGAATCAAGAACATTA
TCATATAGTTCAAAAGTTTTCTTATCCTGGGAGACATTGATGGTTGATGGATGAGTTTAGCAAATGGCTTTCCAA
AAGCAGAAAACATCTACCTGGACACCTGCTTCGCTTTATGACTCACCTTATTTTGTCTTCCGTACTCTGGGACT
ACAGACCAAGGAGGAAGTTTCTATTGAAGTTTAAAGACATACATACAGCTTTTAATAAGAGAGAAACATACAAA
TCTTATAGCATTTTATACCTGTCAATTGCTTCAAGACCTGACTGTTGCCAGTATGCATTATTTTGGAAAGTGT
TACAGAATTTGAACAGCGCCACCATTGCCTGGAGTTGGCTAAAGAAGCAGATTTGGATGTTGCAACAATAACAAA
AACTGTAGTTGAGAATATTCGAAAGAAAGATAATGGTGAATTTAGTCATCATGACCTGGCCCCAGCCCTAGATAC
TGGCACTACTGAGGAGGATCGTTTTAAAAATTGATGTAATTGACTGGTTGGTATTTGACCCAGCGCAGAGGGCAGA
AGCACTGAAACAAGGCAATGCAATTATGAGAAAATCTTGGCATCAAAAAGCACGAAGCTGCAAAAGAAGTATT
TGTGAAAATTCCTCAGGATTCTATAGCAGAAATCTATAATCAGTGCAGGAACAAGGAATGGAAAGTCCACTTCC
TGCTGAAGATGATAATGCTATCCGAGAACATTTGTGCATCAGAGCTTATTTGGAAGCCCATGAAACCTTTAATGA
GTGGTTTTAAGCATATGAATTCAGTTCCACAAAACCTGCTTTGATACCTCAACCAACTTTTACTGAGAAAGTGGC
TCATGAACACAAAAGAAAAGAAATATGAAATGGATTTTGGTATTTGGAAAGGGCATTGGATGCCCTAACTGCTGA
TGTGAAGGAGAAAATGTATAACGTTCTTGTGTTTGTGATGGAGGGTGGATGGTGGATGTTAGAGAGGATGCCAA
AGAAGACCATGAAAGAACACATCAAATGGTCTTACTGAGAAAGCTTTGTCTGCCAATGTTGTGTTTTCTGCTTCA
TACGATATTGCACAGTACTGGTCAGTATCAGGAATGCCTACAGTTAGCAGATATGGTATCCTCTGAGCGCCACAA
ACTGTACCTGGTATTTTTCTAAGGAAGAGCTAAGGAAGTTGCTGCAGAAGCTCAGAGAGTCTCTCTAATGCTCCT
AGACCAGGGACTTGACCCATTAGGGTATGAAATTCAGTTATAGTTTAAATCTTTGTAATCTCACTAATTTTCATGA
TAAATGAAGTTTTTAAATAAAATATACCTGTTATTAGTAATTTTTCTTTTGCATTACCATGTAAAATTTAGACAT
TTGAATTTTGTACTTTTTCAGAATATTATCGTGACACTTTCAACATGTAGGGATATCAGCGTTTCTCTGTGTGCTT
GTTAATAAACTATATAAAAAATTAAATTTTTCTGTTTTTACAAAAA

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FIGURE 3718

MDRSGFGEISSPVIREAEVTRTARKQSAQKRVLLQASQDENFGNTTPRNQVIPRTPSSFRQPFTPTSRSLLRQPD
ISCILGTGGKSPRLTQSSGFFGNLSMVTNLDDSNWAAAFSSQSRSGLFTNTEPHSITEDVTISAVMLREDDFGEAA
SMSMFSDFLQSFLLKHSSTVFDLVEEYENICGSQVNILSKIIVSRATPGLQKFSKTASMLWLLQQEMVTWRLLASL
YRDRIQSALEEEESVFAVTAVNASEKTVVEALFQRDSLVRQSQLVVDWLESIAKDEIGEFSDNIEFYAKSVYWENT
LHTLKQRQLTSYVGSVRPLVTELDPDAPIRQKMPLDDLDREDEVRLKYLEFTLIRAGMTEEAQRICKRCGQAWRA
ATLEGWKLYHDPNVNGGTELEPVEGNPYRRIWKISCWRMAEDELFNRYERAIYAALSGNLKQLLPVCDTWEDTVW
AYFRVMVDSLVEQEIQTTSVATLDETEELPREYLGANWTLEKVFEELQATDKKRVLEENQEHYHIVQKFLILGDID
GLMDEFKWLKSRNNLPGHLLRFMTHLILFFRTLGLQTKEEVSIEVLKTYIQLLIREKHTNLIAFYTCHLPQDL
AVAQYALFLESVTEFEQRHHCLELAKEADLDVATITKTIVENIRKKDNGEFSHHDLAPALDTGTTEEDRLKIDVI
DWLVFDPAQRAEALKQGNAIMRKFLASKKHEAAKEVFVKIPQDSIAEINYQCEEQGMESPLPAEDDNAIREHLCI
RAYLEAHETFNEWFKHMNSVPQKPALIPQPTFTEKVAHEHKEKKYEMDFGIWKGHLDALTADVKEKMYNVLLFVD
GGWMVDVREDAKEDHERTHQMVLLRKLCLPMLCFLHHTILHSTGQYQECLQLADMVSSERHKLYLVFSKEELRKL
LQKLRESSLMLLDQGLDPLGYEIQ

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FIGURE 3719

CCTTCCAAGTAACTGGGATTACAGGCATGTACCACCATACCAGCTGATTTTTTTGTATTTTTAGTAAAGACAGGG
TTTCACCATGTTAGCCAGGCTGATCTTGAACCTCTAACTCAAGTGATCTACTCACCTCAGCCTCCCAAAATGCT
GGGATTACAGATGTGAGGCACCTGGCCTCAGATTTTTGATACTCTTAAACCTTCTGATCCTTAGTTTCTCTCTCC
AAAATACTCTTTCTAGGTTAAAAAAGGCTCTTATATTTGGTGCTATGTAATGAAATGTTTTTAGGTT
TTCTTGATTTAACAATAGAGACAGGGTCTCCCTGTGTTGCCAGGCTGGTCTCGAACTCCTGGGCTCAAGAGATC
CTCCTGTCTTGGCCTCGCAAAGTGCTAAGTAGGATTACAGGCGTTAGCCACCACACCCGGCTGTAAAAATGTACT
TATTTCTCCAGCCTCTTTTGTATAAACCATAGTAAGGGATGGGAGTAATGATGTTATCTGTGAAATAGCCACCAT
TTACCCGTAAGACAAAACCTTGTTAAAGCCTCCTGAGTCTAACCTAGATTACATCAGGCCCTTTTTCACACACAAA
AAAATCCTTTATGGGATTTAATGGAATCTGTTGTTTCCCCCTAAGTTGAAAAACAACCTCTAAGACACTTTAAAGT
ACCTTCTTGGCCTGGGTTACATGGTTCCCAGCCTAGGTTTCAGACTTTTGCTTAAGGCCAGTTTTAGAAACCCGT
GAATTCAGAAAAGTTAATTCAGAAATTTGATAAACAGAATTGTTATTTAAAACTAACTGGAAAGATTGTTAAGT
TCTTTCTGAATTATTTCAGAAATTATGCATCATTTTCCTTCAAGAATGACAGGGTCAGCATGTGGAATTCCAAGAT
ACCTCTTGACTTCTCTCAAGCTCCGTGTTTGGTCAGTGGAGGCCATCCGAGCTCAGCACTGAGAAGTGTTAGT
TTCTTTGGGACCCATCTACCCTGACCACATCATGATGTTTCATCTGCAGCTGTTGCAAGGTGTTTCAGATTGTATAA
ACATAAATGTCACAAAAACTTTAAAAGAAGTGCAATTCTCAAAGGTTAGGTGGACTAAAGCATTCTGTAAAGCA
ACTGCTAATAATGAGCTTACAGTGGATTTGAATTTGAAAAATATAGTAACAAGCCTGTCAAATATCTGCAAGAAC
TATGGAATAAACTACTGATGCAGTGAAGACAGTTGAAAAGATCAAACAAATGCCAAGCTATATTTATAATGAAC
AAATTCAAGAAAAAGGACTACGGAAAGTTCAGGACATCAAAGAAGTCAGGCAAACTCATCTTGACCCCTGTTGC
AGGCAAAGGAACGCAGCTGGAAGAAAAGATGATATAACAGTTAACAGGATGCAGACATGGCAGAGGTTTCCTAAA
AATCTCATTATCTATAACCATTTCTATATTTACATTTGAAAATCTCCTTTGGAGACTTAGAACCTCTAAATTATT
GACTTATTTTTTATATAAGGTCACCTCCGATGAAAGGTGATTACAAAATCATCTACATTGCTGTCTACAAAACAGA
TAATATGGATGTTTGATCGCATCTCATTGTTAACTCTTTACTGATATGTTTGTAAATACAGAAGTGAAATGTGG

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FIGURE 3720

GTAAACCAGCCGGAGCGGCGCGGCAGCGGCAGGACCGCCGTGGCGCCTAGAGTAGCGACCCGGGGGGAGCGCGGG
GCGACGCTGGCTGCAGGGACCCGGTGACAGCGTGAGAGGTTGCGAGAGTACTAGGTTTTGACAAGCTTGCATCAT
GCGTGAGTATAAGCTAGTCGTTCTTGGCTCAGGAGGCGTTGGAAAGTCTGCTTTGACTGTACAATTTGTTCAAGG
AATTTTTGTAGAAAAATACGATCCTACGATAGAAGATTCTTATAGAAAGCAAGTTGAAGTAGATGCACAACAGTG
TATGCTTGAAATCTTGGATACTGCAGGAACGGAGCAATTTACAGCAATGAGGGATTTATACATGAAAAATGGACA
AGGATTTGCATTAGTTTTATTCCATCACAGCACAGTCCACATTTAACGATTTACAAGACCTGAGAGAACAGATTCT
TCGAGTTAAAGACACTGATGATGTTCCAATGATTCTTGTTGGTAATAAGTGTGACTTGGAAGATGAAAGAGTTGT
AGGGAAGGAACAAGGTCAAAATCTAGCAAGACAATGGAACAACCTGTGCATTCTTAGAATCTTCTGCAAAATCAA
AATAAATGTTAATGAGATCTTTTATGACCTAGTGCGGCAATTAACAGAAAACTCCAGTGCCCTGGGAAGGCTCG
CAAAAAGTCATCATGTGAGCTGCTTTAATATACTAAATGCATTGTAGCTCTGAGCCAGGTCTGAAGAACTGTTGC
CCAATTTCAACAGTGCCAGCATTCCAACCTTTGTTAAACCTACCAACATCTTAAATGGACTTTCCTGTGGTGGTACC
CTTTAAGAGGCGGATGAAAGCTACTATATCAGTTTGCACATTCTAATCACTTTCAGTATCACAAAGAGAGATTTT
TACTTATATAATAGTCCTAGAGTTTGCAGCTGGTAAAACCAGAGGCTACATCCAGTATTACTGCTAAGAGACATT
CTTCATCCACCAATGTTGTACATGTATGAAAATGGTGTACTGTATACTTTAACATGCCCCATACTTTGTATTGGA
GAGTACAATAATGTAAATCCTAAAAGCACCCTATTTTAGCATAATAAAAGAAAGTCCAAAGAGCTCCTATATAG
ACTACTCCAGATAACTTCGCTTCTTTGATACTTGTAGCTTATTGTAATTTTTTTAAGAAATTCAGGTCATTAT
TATTGTACAAAATAAGCGCTTTGATTAAACACAGCTATATAGTTTTTTAATTTTTTAAAAAACCTGTGGAGACGGT
GATCTTGTCTTTAAACATGATAGTCCTTTTCACTATAATGTCTTAGATTAAAGACGTTGCCTTTAATATCTGTTG
GGAAGGAAATGTCCAGACTTTTCAAATCTCTTATTATATGTTTCTTTTTTTGTTTACATAGGGAACAATGTTTA
TAGTCGTGTGTACAGTGGGGGTCTACAACAAGAAGTGATATTTTCAAACAATTTTTTAATGATTTAACAATTTT
TGCAATACCAAATATACAGGTTTAGTATTTTTGCCTGTTAGTGATTGTTTACATGTGTAACGTTTTGGTTGAGA
TGTTAAATGGTGGACGAGTACTGTGGATGTGAATGTGGGAAGTAATTTAATCATATGTAATTGGTCACAAGGCC
TAATTTGCAGTAACTATTGCTGTTTTATTTAACAATGCCTTGTGCTTTGTATGCATTAATGTTTGGATGTAAAG
ATTGTGTGTCTATCCAACAGGGAGCCACAGTATTTAAATTGACCAACCTAATGTTACAACCTACTTTGAGGTGGCC
AAATGTAAACTAAAAGCCTTAATTAAAGTGGTGCAATTTTGTAAAAA

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FIGURE 3721

MREYKLVVLGSGGVGKSALTVQFVQGIFVEKYDPTIEDSYRKQVEVDAQQCMLEILD
TAGTEQFTAMRDLYMKNG
QGFALVYSITAQSTFNDLQDLREQILRVKDTDDVPMILVGNKCDLEDERVVGKEQ
QNLARQWNNCAFLESSAKS
KINVNEIFYDLVRQINRKTPVPGKARKKSSCQLL

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FIGURE 3722

TTTCCGCGCTACCTGCAGAGGGGTCCATACGGCGCTGTTCTGGATTCCCGTTGTAACCTAAAGGGAACTTTTAC
AATGTCCGGAGCCCTTGATGTCTGCAAATGAGGGAGGAGGATGTCTTAAGTTCCTTGACGACAGGAACCCACTT
AGGTGGCACC AATCTTGACTTCCAGATGGAACAGTACATCTATGAAAGGAAAAGTGATGGCATCTATATCATAAA
TCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTCATGCTATTGTTGCCATTGAAAACCTGCTGATGTCAG
TGTTATATCCTCCAGGAATACTGGCCAGACGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGC
TGGGCGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGCCTTCCGGGAGCCACGGCTTCTTGTGGTTAC
TGACCCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCGCTGTGTAACAC
AGATTCTCCTCTGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTTACTCAGTGGGTTTGATGTG
GTGGATGCTGGCTCGGGAAGTTCTGTGCATGCTTGGCACCATTTCCTGTGAACACCCATGGGAGGTCATGCCCTGA
TCTGTACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCAGTGACCAAGGA
GGAATTTTCAGGGTGAATGGACTGCTCCAGCTCCTGAGTTCAGTGTCTATTGAGCCTGAGGTTGCAGACTGGTCTGA
AGGTGTACAGGTGCCCTCTGTGCCTATTGAGCAATTCCTACTGAAGACTGGAGCTCTCAGCCTGCCATGGAAGA
CTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGACTGGTCTTTAAGCTGTTCTTGC
ATAGGCTCTTAAGCAGCATGGAAAAATGGTTGATGGAAAATAAGCATCAGTTTCT

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FIGURE 3723

MSGALDVLQMREEDVLKFLAAGTHLGGTNLDFQMEQYIYERKSDGIYIINLKRTWEKLLLLAAHAIVAIENPADVS
VISSRNTGQTAVLKFAAATGATPIAGRFTPGTFTNQIAAFREPRLLVVTDPADHQPLTEASYVNLPTIALCNT
DSPLRYVDIAIPCNNKGAYSVGLMWWMLAREVLCMLGTISCEHPWEVMPDLYFYRDPEEIEKEEQAAAEKAVTKE
EFQGEWTAPAPEFTTAIQPEVADWSEGVQVPSVPIQQFPTEDWSSQPAMEDWSAAPTAAQATEWVGATTDWS

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FIGURE 3724

GGCACGAGAAAATTCATGCGAGGGAGACGTGGTGGGCGGTCCTTCCTGTGACACGACCCTTGAGTGACAGTTCTA
TTTGATTGCCTCCGGTACTGTGAGGAAAGGACACGACTCTATGGTGAGGACTGATGGACATACATTATCTGAGAA
AAGAACTACCAGGTGACAAACAGCATGTTTGGTGCTTCAAGAAAGAAGTTTGTAGAGGGGGTGCACAGTGACTA
CCATGACGAAAACATGTACTACAGCCAGTCTTCTATGTTTCCACATCGGTCAGAAAAAGATATGCTGGCATCACC
ATCTACATCAGGTCAGCTGTCTCAGTTTGGGGCAAGTTTATACGGGCAACAAAGTGCACTAGGCCTTCCAATGAG
GGGGATGAGCAACAATACCCCTCAGTTAAATCGCAGCTTATCACAAGGCACTCAGTTACCGAGCCACGTCACGCC
AACAAACAGGGGTACCAACAATGTCACCTTACACGCCTCCATCTCCAAGCAGGGGTATTTTGCCTATGAATCCTAG
GAATATGATGAACCACTCCAGGTTGGTCAGGGCATTGGAATTCCTAGCAGGACAAATAGCATGAGCAGTTTCAAGG
GTTAGGTAGCCCCAACAGAAGCTCGCCAAGCATAATATGTATGCCAAAGCAGCAGCCTTCTCGACAGCCTTTTAC
TGTGAACAGTATGTCTGGATTTGGAATGAACAGGAATCAGGCATTTGGAATGAATAACTCCTTATCAAGTAACAT
TTTTAATGGAACAGACGGAAGTGAAATGTGACAGGATTGGACCTTTCAGATTTCCAGCATTAGCAGACCGAAA
CAGGAGGGGAAGGAAGTGGTAACCCAACTCCATTAATAAACCCCTTGGCTGGAAGAGCTCCTTATGTTGGAATGGT
AACAAAACCAGCAATGAACAATCCAGGACTTCTCAATACACAATGAAGATTTCCAGCATTACCAGGCTCCAG
CTATAAAGATCCAACATCAAGTAATGATGACAGTAAATCTAATTTGAATACATCTGGCAAGACAACCTCAAGTAC
AGATGGACCCAAATTCCTGGAGATAAAAGTTCAACAACACAAAATAATAACCAGCAGAAAAAGGGATCCAGGT
GTTACCTGATGGTCCGGTTACTAACATTCCTCAAGGGATGGTGACGGACCAATTTGGAATGATTGGCCTGTTAAC
ATTTATCAGGGCAGCAGAGACAGACCCAGGAATGGTACATCTTGCATTAGGAAGTGACTTAACAACATTAGGCCT
CAATCTGAACTCTCTGAAAATCTCTACCCCAAATTTGCGTCACCCCTGGGCATCTTACCTTGTGACCTCAAGA
CATAGACTTCCATGTTCCATCTGAGTACTTAACGAACATTACATTAGGGATAAGCTGGCTGCAATAAACTTGG
CCGATATGGTGAAGACCTTCTCTTCTATCTCTATTACATGAATGGAGGAGACGTATTACAACCTTTTAGCTGCAGT
GGAGCTTTTTTAACCGTGATTGGAGATACCACAAAGAAGAACGAGTATGGATTACCAGGGCACCAGGCATGGAGCC
AACAAATGAAAACCAATACCTATGAGAGGGGAACATATTACTTCTTTGACTGTCTTAACTGGAGGAAAGTAGCTAA
GGAGTTCCATCTGGAATATGACAAATTAGAAGAACGGCCTCACCTGCCATCCACCTTCAACTACAACCCCTGCTCA
GCAAGCCTTCTAAAAA

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FIGURE 3725

MVRTDGHTLSEKRNYQVTNSMFGASRKKFVEGVDSYHDENMYYSQSSMFPHRSEKDMLASPSTSGQLSQFGASL
YQQQSALGLPMRGMSNNTPQLNRSLSQGTQLPSHVTPPTGVPMSLHTPPSPSRGILPMNPRNMMNHSQVGQIG
IPSRTNSMSSSSGLGSPNRSSPSIICMPKQQPSRQPFTVNSMSGFGMNRNQAFGMNNSLSSNIFNGTDGSENV TGL
DLSDFPALADRNRRREGSGNPTPLINPLAGRAPYVGMVTKPANEQSQDFSIHNEDFPALPGSSYKDPTSSNDDSKS
NLNTSGKTTSSSTDGPKFPGDKSSTTQNNNQKKGIQVLPDGRVTNIPQGMVTDQFGMIGLLTFIRAAETDPGMVH
LALGSDLTTLGLNLNSPENLYPKFASPWASSPCRPQDIDFHPSEYLTNIHIRDKLAAIKLGRYGEDLLFYLYYM
NGGDVLQLLAAVELFNRDWRYHKEERVWITRAPGMEPTMKTNTYERGTYFFDCLNWRKVAKFHFLEYDKLEERP
HLPSTFNYNPAQAF

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FIGURE 3726

CTGGTCCCGAGCACGAGCTGTGAGGGGATTCACTTGTGTGCGGAACCTCCTCGGAACCATGGCGTCCCTTTCCCTT
GCACCTGTTAACATCTTTAAGGCAGGAGCTGATGAAGAGAGAGCAGAGACAGCTCGTCTGACTTCTTTTATTGGT
GCCATCGCCATTGGAGACTTGGTAAAGAGCACCTTGGGACCCAAAGGCATGGACAAAATTCTTCTAAGCAGTGGA
CGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATTCTAAAAAACATTGGTGTTGACAATCCAGCAGCT
AAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATGAAGTTGGTGATGGCACTACCTCTGTTACCGTTTTAGCA
GCAGAATTATTAAGGGAAGCAGAATCTTTAATTGCAAAAAAGATTTCATCCACAGACCATCATAGCGGGTTGGAGA
GAAGCCACGAAGGCTGCAAGAGAGGCGCTGTTGAGTTCTGCAGTTGATCATGGTTCGGATGAAGTTAAATTCGGT
CAAGATTTAATGAATATTGCGGGCACAACATTATCCTCAAACTTCTTACTCATCACAAGACCACCTTTACAAAG
TTAGCTGTAGAAGCAGTTCTCAGACTGAAAGGCTCTGGCAACCTGGAGGCAATTCATATTATCAAGAAGCTAGGA
GGAAGTTTGGCAGATTCTTATTAGATGAAGGCTTCTGTTGGATAAAAAAATTGGAGTAAATCAACCAAAACGA
ATTGAAAATGCTAAAATCTTATTGCAATACTGGTATGGATACAGACAAAATAAAGATATTTGGTTCCTCGGGTA
AGAGTTGACTCTACAGCAAAGGTTGCAGAAATAGAACATGCGGAAAAGGAAAAAATGAAGGAGAAAGTTGAACGT
ATTCTTAAGCATGGAATAAATTGCTTTATTAACAGGCAATTAATTTATAATTATCCTGAACAGCTCTTTGGTGCT
GCTGGTGTCATGGCTATTGAGCATGCAGATTTTGCAGGTGTGGAACGCCTAGCTCTTGTCACAGGTGGTGAAATT
GCCTCTACCTTTGATCACCAGAACTGGTGAAGCTTGAAGTTGCAAACCTTATCGAGGAAGTCATGATTGGAGAA
GACAACTCATTCACTTTTCTGGGGTTGCCCTTGGTGAGGCTTGTACCATTGTTTTGCGTGGTGCCACTCAACAA
ATTTTAGATGAAGCAGAAAGATCATTGCATGATGCTCTTTGTGTTCTTGCACAACTGTAAAGGACTCTAGAACA
GTTTATGGAGGAGGCTGTTCTGAGATGTTGATGGCTCATGCTGTGACACAGCTTGCCAATAGAACACCAGGCAAA
GAAGCTGTTGCAATGGAGTCTTATGCTAAAGCACTGAGAATGTTGCCAACCATCATAGCTGACAATGCAGGCTAT
GACAGTGACAGCTGGTGGCACAGCTCAGGGCTGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGG
GAAGGCACCATTTGGAGATATGGCTATCCTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGT
GCAGCTGAAGCAGCAGAGGTGATTCTGCGTGTGGACAACATCATCAAAGCGGCACCCAGGAAACGTGTCCCTGAT
CACCACCCCTGTTAAGCATTCCCACGTGCTGTGATCTTTGGACCAGTTTCTAGCAAAGTTGTGTTTGAAAGATA
CTCTATTAAAGAAGACTGTGGAATCTGTTTATCGGTGCCCATATATCCTTAAGTTTGGATATTTAGCTGACCTT
CGCTTTAACATAGGTCTAATTTATTTGCCGTGTCATTTTCCATACAAATCAGTTGATTTAAAAAAGTTCATTTCT
CATACTGTGCATTAAAAATAAAATTTGAACAAT

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FIGURE 3727

CGGCGTTCTCCACCTGCGCGGGCCTGAATGGCCTTCAGGAGCACAGTCGGCCTGAGGAGTTGACGGTTACTCACC
GCCGTGAGCCCAAGTAACCTCGCCCTCCTTCGGCTAAAAACCCTCCGCCCTGGGCCCCGCGGACAGGAGCGCGGTCT
CTGAGGGGAGCGGCGACCCCGCCAGCCCCGGTCTCTTTCCCTGGCGGCGGCGGCTTCTTCCGTGGGACAATATGT
TCAAGAGAATGGCCGAATTTGGGCCTGACTCCGGCGGGAGAGTAAAGGGTGTTACTATCGTTAAACCAATAGTTT
ACGGTAATGTTGCTCGGTATTTTGGAAAGAAAAGAGAAGAAGATGGGCACACTCATCAGTGGACAGTATATGTGA
AACCATATAGAAATGAGGATATGTCAGCATATGTGAAGAAAATCCAGTTTAAATTACATGAAAGCTATGGCAATC
CTTTAAGAGTTGTTACTAAACCTCCATATGAAATTACTGAAACAGGATGGGGTGAATTCGAAATAATCATCAAAA
TATTTTTTCATTGACCCTAATGAAAGACCTGTAACCCTGTATCATTTGCTAAAGCTGTTCAATCAGACACCAATG
CAATGCTGGGGAAAAAGACAGTGGTTTCAGAGTTCTATGATGAAATGATATTTCAAGACCCAACAGCAATGATGC
ACAATTATTGACAACATCTCGTCAGCTAACATTAGGAGCCTATAAGCATGAAACAGAATTTGCAGAGCTTGAAG
TGAAAACCAGAGAAAAATTAGAAGCTGCTAAGAAAAAACAAGCTTTGAGATTGCAGAGCTTAAGGAGAGATTAA
AAGCAAGTCGTGAACTATAAATTGTTTAAAAAATGAAATCAGAAAACCTGAAGAAGATGACCAAGCAAAAGACA
TATAAACAGTTCTCATGAGAACTTGGTAGTAAGCTAACTGAAAATAAGGTGGGCTTCACTGGAGAAATGGACTT
ACTGCAAATGCTGTGATGTTTCTTAGAGGAACCTCATATACAGCTGTTGACCATGAATTTCTTAGCAATAGGAAT
TTGTACTATTTAAGCAATCTTTAATGGAAAATATGTGTGTAAGAATGGATGCTATATAGGTATTTTACCAACCCA
TTTTAAGAAAATTCATGATATTAAGCACAGTTTTTAAAAATGTTTATTGTAGTATATGTATAGCTTATTACCCCT
TTTGACAGGCATCAAAATTTCAATTATAAAGTATTACTTGTACAAATTTTGTACTTCTTAGTGGCTAGAATTAGT
GAAGAACTTAATGTGTATATTTAATTTCTTCAAGTTCTTACCTGCCCCATCCTTTTTTGTATATGATGTGTCC
AGTAAGTATTCAATAAATGTAGTTTACAGATCCTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3728

MFKRMAEFGPDSGGRVKGVTIVKPIVYGNVARYFGKKREEDGHTHQWTVYVKPYRNEDMSAYVKKIQFKLHESYG
NPLRVVTKPPYEITETGWGEFEIIKIFFIDPNERPVTLYHLLKLFQSDTNAMLGKKTVVSEFYDEMIFQDPTAM
MQQLTTSRQLTLGAYKHETEFAELEVKTREKLEAAKKKTSFEIAELKERLKASRETINCLKNEIRKLEEDDQAK
DI

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FIGURE 3729

CTAGCACTCTGACCTAGCAGTCAACATGAAGGCTCTCATTGTTCTGGGGCTTGTCCCTCTTCTGTTACGGTCCA
GGGCAAGGTCTTTGAAAGGTGTGAGTTGGCCAGAACTCTGAAAAGATTGGGAATGGATGGCTACAGGGGAATCAG
CCTAGCAAACCTGGATGTGTTTGGCCAAATGGGAGAGTGGTTACAACACACGAGCTACAACTACAATGCTGGAGA
CAGAAGCACTGATTATGGGATATTTTCAGATCAATAGCCGCTACTGGTGTAAATGATGGCAAAACCCAGGAGCAGT
TAATGCCTGTCAATTTATCCTGCAGTGCTTTGCTGCAAGATAACATCGCTGATGCTGTAGCTTGTGCAAAGAGGGT
TGTCCGTGATCCACAAGGCATTAGAGCATGGGTGGCATGGAGAAATCGTTGTCAAACAGAGATGTCCGTCAGTA
TGTTCAAGGTTGTGGAGTGTAACTCCAGAATTTTCCTTCTTCAGCTCATTTTGTCTCTCTCACATTAAGGGAGTA
GGAATTAAGTGAAAGGTCACACTACCATTATTTCCCTTCAAACAAATAATATTTTACAGAAGCAGGAGCAAAA
TATGGCCTTTCTTCTAAGAGATATAATGTTCACTAATGTGGTTATTTTACATTAAGCCTACAACATTTTTCAGTT
TGCAAATAGAACTAATACTGGTGAAAATTTACCTAAAACCTTGGTTATCAAATACATCTCCAGTACATTCGGTTC
TTTTTTTTTTTTGAGACAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGCGCAATCTCGGCTCACTGCAACC
TCCACCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACGGGCGCCCGCCACCACG
CCCGGCTAATTTTTTGTATTTTGTAGTAGAGACAGGGTTTCACCGTGTAGCCAGGATGGTCTCGATCTCCTGACC
TTGTGATCCACCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCGGCCACATTCAGT
TCTTATCAAAGAAATAACCCAGACTTAATCTTGAATGATACGATTATGCCCAATATTAAGTAAAAAATATAAGAA
AAGGTTATCTTAAATAGATCTTAGGCAAAATACCAGCTGATGAAGGCATCTGATGCCTTCATCTGTTTCAGTCATC
TCCAAAAACAGTAAAAATAACCACTTTTGTGGGCAATATGAAATTTTAAAGGAGTAGAATACCAAATGATAG
AAAACAGACTGCCTGAATTGAGAATTTTGATTTCTTAAAGTGTGTTTCTTTCTAAATTGCTGTTCTTAAATTTGAT
TAATTTAATTCATGTATTATGATTAAATCTGAGGCAGATGAGCTTACAAGTATTGAAATAATTACTAATTAATCA
CAAATGTGAAGTTATGCATGATGTAAAAAATACAAACATTCTAATTAAAGGCTTTGCAACAC

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FIGURE 3730

MKALIVLGLVLLSVTVQGKVFERCELARTLKRLGMDGYRGISLANWMCLAKWESGYNTRATNYNAGDRSTDYGIF
QINSRYWCNDGKTPGAVNACHLSCSALLQDNIADAVACAKRVVRDPQGI RAWVAWRNRCQNRDVRQYVQGCGV

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FIGURE 3731

CCCTGAGTCACTGCCTGCGCAGCTCCGGCCGCTGGCTCCCCATACTAGTCGCCGATATTTGGAGTTCTTACAAC
ATGGCAGACATTGACAACAAAGAACAGTCTGAACCTTGATCAAGATTTGGATGATGTTGAAGAAGTAGAAGAAGAG
GAAACTGGTGAAGAAACAAACTCAAAGCACGTCAGCTAACTGTTTCAGATGATGCAAAATCCTCAGATTCTTGCA
GCCCTTCAAGAAAGACTTGATGGTCTGGTAGAAACACCAACAGGATACATTGAAAGCCTGCCTAGGGTAGTTAAAC
AGACGAGTGAATGCTCTCAAAAACCTGCAAGTTAAATGTGCACAGATAGAAGCCAAATCTATGAGGAAGTTCAC
GATCTTGAAAGGAAGTATGCTGTTCTCTATCAGCCTCTATTTGATAAGCGATTGAAATTATTAATGCAATTTAT
GAACCTACGGAAGAAGAATGTGAATGGAACCAGATGAAGAAGATGAGATTTCGGAGGAATTGAAAGAAAAGGCC
AAGATTGAAGATGAGAAAAAGATGAAGAAAAAGAAGACCCCAAAGGAATTCCTGAATTTTGGTTAACTGTTTTT
AAGAATGTTGACTTGCTCAGTGATATGGTTCAGGAACACGATGAACCTATTCTGAAGCACTTGAAAGATATTAAA
GTGAAGTTCTCAGATGCTGGCCAGCCTATGAGTTTTGTCTTAGAATTTCACTTTGAACCCAATGAATATTTTACA
AATGAAGTGCTGACAAAGACATACAGGATGAGGTCAGAACCAGATGATTCTGATCCCTTTCTTTTGATGGACCA
GAAATTATGGGTTGTACAGGGTGCCAGATAGATTGGAAAAAGGAAAGAATGTCACTTGAAAACATATTAAGAAG
AAGCAGAAACACAAGGGACGTGGGACAGTTCGTACTGTGACTAAACAGTTTCCAATGACTCTTTCITTAACITTT
TTTGCCCTCCTGAAGTTCCTGAGAGTGGAGATCTGGATGATGATGCTGAAGCTATCCTTGCTGCAGACTTCGAA
ATTGGTCACTTTTTACGTGAGCGTATAATCCCAAGATCAGTGTATATTTTACTGGAGAAGCTATTGAAGATGAT
GATGATGATTATGATGAAGAAGGTGAAGAAGCGGATGAGGAAGGGGAAGAAGAAGGAGATGAGGAAAATGATCCA
GACTATGACCCAAAGAAGGATCAAACCCAGCAGAGTGCAAGCAGCAGTGAAGCAGGATGTATGTGGCCTTGAGG
ATAACCTGCACTGGTCTACCTTCTGCTTCCCTGGAAAGGATGAATTTACATCATTTGACAAGCCTATTTTCAAGT
TATTTGTTGTTTGTGCTTGTGTTTTGTTTTTGCAGCTAAAATAAAAAATTTCAAATACAATTTTAGTTCTTACAA
GATAATGTCCTTAATTTTGTACCAATTCAGGTAGAAGTAGAGGCCTACCTTGAATTAAGGGTTATACTCAGTTTTT
AACACATTGTTGAAGAAAAGGTACCAGCTTTGGAACGAGATGCTATACTAATAAGCAAGT

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FIGURE 3732A

AGAGGCCAGGAGGCTGGGTGAGGCGCTGAGACGGTTTGGCGGTGAGTCCTGGGCCAGGCGCAGCTGAAAGGCC
GCAACCCGGGAAACGTCAAAACAAACAGAAGGACTTGGGATTCCGGAGCAGTCGCCCTATCGCTGCTCCTGCAG
TTGCGGACGCCACCGACCCCGCCGCCGGAGGACTGGGCACTGAAAGGCCTCTAGGCCTAGGCGCGGCCCGCGGAG
CCAGACGTGTTGCTGCCGTGAGTAAACGAGCGCCCTCTCCGCACTCGTTTACAAATTAATGAGGAAATTTT
GTTGGCAACCTGGATACTAACAAGCTAGAGGCCATCGCTCAGGAGATTTACGTAGACCTGATAGAGGATTCTTG
TTTGGGATTCTGCTTTGAGGTGCACCGGCGAGTCAAGTGTGGCTACTTCTACCTGGAGTTCGCAGAGACTGGTAG
CGTGAAGGATTTTGGCATTACGCCAGTGAAGACAAAGGAGCGTGCCGCCCTCCCGCTTTGCTCCCTTCCCGGAGA
ACCTGGGAATGGGCCTGATCAGCAGCTGCAGCGCTCACCTCCGGAATTCAGTAGCTGCAAAATGAGAGTCTGAA
AGTGGCCAGGACAATAACATAGACTGGTCCTGTGGCTTCGAGGAGTAAGCTAAGTAGAAAAAGTAGAAAAATCA
GACAAAAGTTTTAATTCCCCCTTGAAGATCCTAGCATTAAAAACCAAGTGGATAATTTAGGAATCCTTTTTT
TAAAGTGTATTACCTGGAGCAAGCTCTGAAGCCCTGGGCAGGAGGAGCTGCACAGCCTGCGGGCCATGCAGTGCC
TGTTGATCTCTAAACACACCAGGATGTGCGCAAGATCCTGTAGTGCCCCAGTGCACAGGTGAGCAGTTGTGTGC
CCAGCATATAAAATTTTTGGTTCCCTCAGCCTTTCGTCTGCCCTGATGTCAAGGGCTTCTTGACAGTTTGGAGT
TACAGTTCGTCAGGCCGTGATCAGTGGCCTGCAGTGGGACTGCTCCTTTGATATCTGAACCTCTGTTATGGGCTT
CTCTGAGACAAGTAAATGTGAGGTGCAAGATCTGGATACTAACAGTTTCAGTTTGGGAAATCCAAGAAAAAGAT
TATCAAGTTTGATAGGGAAGCTCTGTAGCCTTGACTCCAGCAAGAAGAAAAGGTCAAACCACGTGTTTCCCAA
AGTCCAGACTACAATGATTACAGCTGACTTGAGGACAAGGCCCTAGCATTGGCTGAGCAGAGCCCTCTCCTTGCC
CTCCAACCTGGTGGCATAGGCTTGGCAAATGGACAACCTTGGTTGTCCAGACAGGTTGAGGATTCGGTTATGATCC
CCTGGGGAGGTAGCAGGGACCTCTGCAACTATGCATGATTCTCAAACCTCAAGATTCATGTCTGGATGTATTAT
GCTGTGGATATAAGTTTAGTAGGGCGGTCAATTCCTACTCTGAGTTACTGGTTACCTAGCCAGTCCATGGGTGTG
ACTTGGTCCTTAAGTCAGGTCACTATCTGCCTCCACCCCTGGGGGAGGACTGAAGTATGGAAGAGCATCATGGC
TGTGCAGGAGGCTGTGGTTTGAAAACCTGAGCCAGAGGGGCACCTTCAGCTGCCCTCAATAATGTGAATGGATTAG
TGCTAGGAGCCAAGGAGCAGGACTGATTATCTCATCTGACTGTGTGCAGATCCTGTTGAATGTCCCTGTTTTT
TTTGGTTGGGCGAGTCAGAGCTCTGCTATGGTGAACATCCAGACTGTCACCCTTCTGTCTGCCGCTCGAAAGGG
ATAGTCTTTCCACTCGGTCCCTTTGGATCTTCTTGACAACAGGAGCAGTCCTTTTATTGTTAGAAGTCAGAGA
AAGACCTCCAGAATCTCCTGACTTTAGGGAATGGTATAGGGGAAGATGGGAAGTAAGAGTCACATATCAAACTA
CCCTCCACTTTTATCCCTGAGCGAGGGTTTATGAAGTATAAAGGGGTGGGAGCCCCGAGGTGAGCGGGAACGGTG
CTGCTTTATTTGAATGTTTTCTTACCTCATTCTGTGCCCACTAGGGGGTCCAGCCTCATCTGTCTGGCTTGGC
CCTGTGTTCCCTCCTGTCCCTGCTCCACTGCCTATCTGGTGCCCCAGGTGCTGCTTGCCACTCCAGCTGTCACAT
TGAACAGTTTCAATTCAGCTCTTAATGCTCCTGCTTCCGAAGCCTGCCCAATTTCTTTTTCTTGGCCTCTGTTT
TTTTTTTTCTTTCTTTTTCCCTTGTTTTTGTAGAAGACTCAGAGGAGAATCTTCTTATGGCTCCCTCTGTGA
GATTGGAATTGGAAGAGAACTTAATTTTTTGTATTATAAATGCAGTGTATGCCTATAAGCATTCTCCTATATA
GGACTGCTTTGCTAGTGTGCCCTCTTGCTGTGTCTTACTTCATAAGGAGTTGTATCTTCCACCTCCATTTCAAT
ACTGCCGTTTAGGACCTAAGTAGAAGAGCAGTAAAGGCTGATTGACACACAGGGGGATGGAGTTGGTCCTTGTC
ATTCTCTCACCTTGCTGTGCATGTATCAATCCTTATCCAGAAGGTAATTTAGACTGTATAGACTGATTTAG
ATTACATACTTTAGAGGATTAAGGAAACCATAGAGTTTGGGCCTTGGAACTGTTACTGCCTTGCTCTAGAGTTGT
CCTGATCAGGCTTGGGGCTAGTTACAGATTAGTCTTAAAGAATTGCATTAACCTAAAAAAATCAAACCTTGGC
AAGAGCTAAATAATTTGGAGATATCTTTGCCCTTGACTTGTAGACGACATCTAAGAGGATGAAGAAAGGAGAGT
CTAAGTGAGACTCTGGCCTACTTCTAACAATGTCTTGAAGTGGGATGATGGTAAAGGAGAAAGGCCACAGTCC
AATCCCTCTGCCTTCAGATAGGGAACCTCAAATCCTGAAATTACTGTTTTCTTTCTGGCCTTTTCTCCTGGTTAGA
GGAGGAAGCGGAAAGTAGTTTTGAGTAGTATTTGTTTATATTACCCCTTTTGTTTTTTGTCTGGCCCCCTC
TACCAATAGGGCAGTAGCCTCCTGCCCTGGATGGGTATAAGGTGGGCTTGGTCCAACAGGTGCCAGAGGGTACA
TACTCCTTTCTGGGGAGAGAATGCTCCCTACCATATAGTTGACAGTGGTTAGGAACTCTCCCTTTCCCTACCTAC
CTTCTTTTAAATAGCAGAATTCCTATTTTTCCCTTGATTATGTGTATTGATCACCTGCAATCCTATTATGTATC
TGAGTGTGTGTGTGTGTGTATGTGTGTGTTATGGGGGAAGGGGGGGGTTCTTTAAATTTCTGTGGTTTGTGGCT
TTTTCTTCCATACATTAGTTCCACCATCGCATGCCAGGGGACCCTGCCTGGCATTATCGCATGCTGGGATCAT
CGGGGGAGGGTAGTGAAGCTCACCACTGTCCTTTGTTTTGGAGATTTTTATTTTTGCATAAGTAGTCCATCCTAT
ACAGATAGCTGATTAACTGTATTCCCTTTCCCTATGGCTGCTGGTGTAAATAAACTGCATCTCCCCATTGGTA

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FIGURE 3732B

AACAGTAATAAAATTTTAAAAAATG

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FIGURE 3733

MFSYLILCPSRGSSLICLAWPCVPPVPCSTAYLVPQVLLATPAVTLNSFNSALNAPASEACPISFFLASVFFFSE
FFPCFCRRLRGESFLWLPLLRLELEENLIFCI

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FIGURE 3734

GAACCGCCATCTTCCAGTAATTCGCCAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCCATATATGTTCT
CTAGGCCTTTTAAAGAAACATGGAGTTGTTTGTGTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATACTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATG
TGCGTATTGAGCACATTAAGCACTCTAAGAGCTGAGATAGCTTCCTGAAACGCGTGAAGGAAAATGATCAGAAAA
AGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCTGTGAATTCATGGCATAAATAGGTGTTAAAAA
AAAAATAAATAAAGGACCTCTGGGCTAT

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FIGURE 3735

MTNTKGKRRGTPYMF SRPFRKHGVVCLATYMRIYKKGDIVDIKMGTVQKGMPHKCYHGKTGRVYNVTQHTVGIV
V NKQVKGKILAKRINVRIEHIKHSKSEDSFLKRVKENDQKKKEAKEKGTWVQLKRQPAPPREAHFVRTNGKEPEL
LEPIPCFMA

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FIGURE 3736A

ATGAAGATGGCGGACGCGAAGCAGAAGCGGAACGAGCAGCTGAAACGCTGGATCGGCTCCGAGACGGACCTCGAG
CCTCCGGTGGTGAAGCGCCAGAAGACCAAGGTGAAGTTCGACGATGGCGCCGTCTTCTGGCTGCTTGCTCCAGC
GGCGACACGGACGAGGTCTCAAGCTGCTGCACCGCGCGCGCCGACATCAATTACGCCAATGTGGACGGACTCACT
GCCCTGCACCAGGCTTGCAATTGATGACAATGTTGATATGGTGAAGTTTCTGGTAGAAAATGGAGCAAATATTAAT
CAACCTGATAATGAAGGCTGGATACCACTACATGCAGCAGCTTCTGTGGATATCTTGATATTGCAGAGTTTTTG
ATTGGTCAAGGAGCACATGTAGGGGCTGTCAACAGTGAAGGAGATACACCTTTAGATATTGCGGAGGAGGAGCA
ATGGAAGAGCTACTTCAAAATGAAGTTAATCGGCAAGGGGTTGATATAGAAGCAGCTCGAAAAGGAAGAAGACGG
ATCATGCTTAGAGATGCCAGGCAGTGGCTAAATAGTGGTCATATAAATGATGTCCGGCATGCAAAATCTGGAGGT
ACAGCACTTCACGTTGCAGCTGCTAAAGGCTATACGGAAGTTTTAAACTTTTAAATACAGGCAGGCTATGATGTT
AATATTAAAGACTATGATGGCTGGACACCTCTTCATGCTGCAGCTCATTGGGGTAAAGAAGAAGCATGTGCAATT
TTAGTGGACAATCTGTGTGATATGGAGATGGTCAACAAAGTGGGCCAAACAGCCTTTGATGTAGCAGATGAAGAC
ATTTTAGGATATTTAGAAGAGTTGCAAAAGAAACAAATCTGCTCCATAGTGAAAAACGGGACAAGAAATCTCCA
CTAATTGAATCAACAGCAAATATGGACAATAATCAGTCACAGAAGACCTTTAAAAACAAAGAGACGTTGATTATT
GAACCAGAGAAAAATGCATCCCGTATTGAATCTCTGGAACAAGAAAAGGTTGATGAAGAAGAAAGGAAAGAG
GATGAGTCTAGCTGCTCTAGTGAAGAAGATGAGGAAGATGACTCGGAATCAGAAGCTGAAACAGATAAGACAAAA
CCCCTGGCTTCTGTAACTAATGCCAACCTTCTAGTACACAAGCAGCTCCTGTAGCTGTTACAACACCTACTGTG
TCATCAGGTCAAGCAACACCTACATCACCTATTAAGAAAGTTTCCAACCACAGCTACAAAAATTTCTCCAAAGAA
GAAGAGAGAAAAAGATGAGTCTCCTGCAACTTGGAGGTTAGGACTTAGAAAGACGGGCAGCTATGGTGCACCTTGCT
GAAATCACAGCATCTAAAGAGGGTCAGAAAGAAAAAGATAGTAAAGGAACCTAGGCTTGATATGTTGCACCTACA
CTTTCTCTCTTTGGATAATAAAGAAAAGGAGAAAGATAGTAAAGGAACCTAGGCTTGATATGTTGCACCTACA
ATACCAAGACGACTAGCCAGTACATCTGACATTGAAGAGAAAGAAACAGAGATTCTTCAAGTTTGCGAACAAGT
AGTTTATATACAAGGAGAAAAATGGGAAGATGATCTTAAAAAAAATAGCTCAGTTAATGAAGGATCAACGTATCAT
AAAAGTTGCTCCTTTGGTAGAAGACAAGATGATTGATTAGTTCTAGTGTTCGAAGCACCACATCAACACCAACA
GTTACCTCTGCAGCTGGGCTTCAGAAAAGCCTGCTTTCCAGCACAAGCACTACTACAAAGATTACAACGGGTCTCT
TCTCAGCAGGCACACAAAGCAGTACCTCAAATCGTTTGTGGGCTGAGGATAGTACTGAGAAAGAAAAGGACAGT
GTTCTACGGCAGTGACCATTCCTGTTGCTCCAACCTGTTGTAAATGCTGCAGCTTCTACCACAACCTTGACTACA
ACTACTGCTGGCACTGTCTCTCCACAACAGAGGTCAGGGAGAGACGCAGATCATACCTCACTCCTGTTAGGGAT
GAAGAGTCTGAATCCCAAAGAAAAGCAAGATCTAGACAAGCAAGACAATCTAGAAGATCAACACAGGGAGTGACA
TTAACTGATCTTCAAGAAGCTGAGAAAACAATAGGAAGAAGTCGTTCTACCCGAACCAGAGAAACAAGAAATGAA
GAAAAAGAAAAAGAGGAAAAAGAGAAACAAGATAAAGAGAAACAAGAGAAAAGAGGAGTCAGAAACATCTAGA
GAAGATGAATATAAACAAGTACTCCAGAACGTATGATGAGACTTACCAGCGTTATAGGCCAGTATCAACTTCA
AGTTCAACCACTCCATCCTCTTCACTTTCTACTATGAGCAGTTCACTGTATGCTTCAAGTCAACTAAACAGGCCA
AATAGTCTTGTAGGCATAACTTCTGCTTACTCCAGAGGAATAACAAAAGAAAATGAAAGAGAGGGAGAAAAAGA
GAAGAGGAGAAAGAAGGAGAAGATAAATCACAACCTAAATCAATCAGAGAACGACGACGACCAAGAGAGAAAAGA
AGATCTACAGGAGTTTCATTTTGGACACAAGATAGTGATGAAAATGAACAAGAACAACAATCAGACACAGAAGAG
GGATCCAATAAGAAAGAAACTCAGACGGATTCCATTTCTAGATATGAAACCAGTTCTACATCAGCTGGTGATCGA
TATGATTCTTGTGCTGGGTCGCTCTGGATCATACAGTTACTTAGAAGAAAGAAAACCTTACAGCAGCAGGCTAGAA
AAGGATGACTCAACTGACTTTAAAAAGCTTTATGAACAAATCTAGCTGAAAATGAAAAGCTGAAGGCACAGCTA
CATGATACAAATATGGAACCTAACAGATCTTAAATTACAGTTGGAAAAGGCCACCCAGAGACAAGAAAGATTGCT
GATAGATCACTGTTGGAATGGAAGAAAGGGAACGAAGAGCTCTAGAAAGAAGAAATATCTGAAATGGAAGAAGAG
CTCAAAATGTTACCAGACCTAAAAGCAGACAACCAGAGGCTAAAGGATGAAAATGGGGCCTTGATCAGAGTTATA
AGCAAACCTTTCCAAATAAAAAAAGAGCAGCAAGTAATGGAATTGCACATATTAGTAACCCAGTGGACCATA
ATTGGCAGTCACTGGAAGTCTGGGAAGAATCCTTGGAGACTGTCATTTTCGGATATCCTGCCAAATGCCCTCTTA
TCTAGAATTTTTGTTTCATTTTGTAAATTTCTGGGGTGTGTTTGTGTTGTTGTTGTTTGTGTTTTGTTTTT
TTTTAATCAAGACCATTGTTTCATGTTAATGCAGCTGCTGAGAAGATTTTTTTTTTAATGACTGAGAAAACCTTGTT
TACAGCTCCAGCATATAAGGAAAGTGTTCAGGCCAGATATGCCTCAGATATTTAACCAGTAAGCCTTAGTTGTA
CATAAATACTTTTGTGTCAACAAAACCTTTTCTCAGCTCTCAGAGAAGACAGTTACTCAACATTTTTTGATGTGCCAC
AGTTTCGAGTTTTTTCGATATTTAAATTTTTTGGCTTTTCATCTAAGTTTGGGTTTGATTTTTTCTCTTCTAAACT

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FIGURE 3736B

CTTCAITGIGGCAGAGTCTTCTATGTTTTACAGCTTTTTTCATTACAGAAAAGAACACTTGCTCTTCTGTGATTAT
TGTCATGTATTAGGCTAATGCTGTGTGTCTCCACCTGGAAGTGAATTGCTTGGTGGAACATATGCTTTCACTG
TTTGIGCAATATGCATTTATTTCTTATATGAATGCTTTAAAGTCATTTGAGGTTAGATCTTTAATTCCTATTTT
CTGCTTCATTGGTCACTTTTTTTTTTTATTGTAGTATAAGATGTTAGATTCTGTAATCTTCACATTCATTTTAGCAG
GTACTGAGTGATGCTGTATATACAAATAAGTGTATTGTTTTGATTTTTAGACCACCACATGGCATGCTTGACTAT
TTCTTATTTTCAAATGTCTGCTAATGCAGAGTAGGCTACTCCATGATAGTGTTAAAAAACAAAATTTGCTAACAAT
GTGATATAAAGACTTTAAAAGTTACACATTATGTGGAGCCCTATCTTTACAAAAGTTTCCTACTGTAAAGTGCTT
TTATTTTTCAGTTTTCACTTGATAGTACTCAACCATAATTAAAGTTGCATAAGATAATTGCTTTACATTTACATA
CCTATATTTATCTGAGTGCTGTCTAAAAGTGTGTGCTAGCCAAAGTAATGCTATGAAATCATTTCAGAAATTAA
CCCGTGAGTTAATGTTAAATGCACGTGTTATTGCCATGTGAAGAGGCATCGACTTTGATACCACCATCATGTTTCAG
ACCATTTTATACATTTTCAGTGGCCTTTTTTTTTTTTTTAAGGAAAAAAGCGCAAAACCAAGTACATAGTGACGA
TGGCTTTTATTTGGACAAATAGCTTTTATATTTTCATTAAACCATGCAAAAAATACTACATCTTTCTGGCACATA
ACTGCTCTCCTTAACCACTGAACAGTTCAGCCATTTGAATAAATTGTACATTGTAAAGCTTATAGTAGCTGATTGT
ATTATTGATTGTATTGTATACTATATTAATGTGAATTTGT

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FIGURE 3737

CAGCCTTGGAGGGAGGGATTAGAAGCCGCTAGACTTTTTTCTCCCTCTCAGTAGCACGGAGTCCGAATTAAT
TGGATTTTCATTCACTGGGGAGGAACAAAACTATCTGGGCAGCTTCATTGAGAGAGATTCAATTGACACTAAGAGC
CAGCGGCTGCAGCTGGGTGCAGAGAGAACCTCCGGCTTTACTTCTGTCTCGTCTGCCCCAACCGCTAGCCTCGGC
TTGGGTAAAGGCGAGGCGGAATTAAACCCCGCTCCGAGAGCGGCAGCTTCGCGCGCGGTGCGCTCGGCCATATGCTT
GCCCCGAGGGGCGTCTGGTAGGCACCCCGCCCTCTCCCGCAGCTCGACCCCCATGATAGATACGCTCAGACCCGT
GCCCTTCGCGCTCGGAAATGGCGATCAGCAAGACGGTGGCGTGGCTCAACGAGCAGCTGGAGCTGGGCAACGAGCG
GCTGCTGCTGATGGACTGCCGGCCGAGGAGCTATACGAGTCGTGCGACATCGAGTCGGCCATCAACGTGGCCAT
CCCGGGCATCATGCTGCGGCGCCTGCAGAAGGGTAACCTGCCGGTGCAGCGCGCTCTTCACGCGCGGCGAGGACCG
GGACCGCTTCACCCGGCGCTGTGGCACCGACACAGTGGTGCTTACGACGAGAGCAGCAGCGACTGGAACGAGAA
TACGGGCGGCGAGTCGGTGCTCGGGCTGCTGCTCAAGAAGCTCAAGGACGAGGGCTGCCGGGCGTCTACCTGGA
AGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCATTGCGAGACCAATCTAGACGGCTCGTGTAGCAGCAG
CTCGCCGCGGTTGCCAGTGCTGGGGCTCGGGGCGCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGA
CCTTGACCGAGACCCCAATAGTGCAACAGACTCGGATGGTAGTCCGCTGTCCAACAGCCAGCCTTCCTTCCAGT
GGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAGGAATTGGGCAT
CAAGTACATCTTGAACGTCACCCCAATTTGCCGAATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAT
CCCCATCTCGGATCACTGGAGCCAAAACCTGTCCAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCC
GGGCAAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCT
TATGCAGAAGCTCAATCTGTGATGAACGACGCCTATGACATTGTCAAAATGAAAAATCCAACATATCCCTTAA
CTTCAACTTCATGGGTGAGCTGCTGGACTTCGAGAGGACGCTGGGACTCAGCAGCCCATGTGACAACAGGGTTCC
AGCACAGCAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCTACGTGAAA
GACCCACACCCCTCCTTGCTGGAATGTGTCTGGCCCTTCAGCAGTTTCTCTTGGCAGCATCAGCTGGGCTGCTT
TCTTTGTGTGTGGCCCCAGGTGTCAAAATGACACCAGCTGTCTGTACTAGACAAGGTTACCAAGTGCGGAATTGG
TTAATACTAACAGAGAGATTTGCTCCATTCTCTTTGGAATAACAGGACATGCTGTATAGATACAGGCAGTAGGTT
TGCTCTGTACCCATGTGTACAGCCTACCCATGCAGGGACTGGGATTGAGGACTTCCAGGCGCATAGGGTAGAAC
CAAAATGATAGGGTAGGAGCATGTGTTCTTTAGGGCCTTGTAAGGCTGTTTCCCTTTTGCATCTGGAAGTACTATA
TAATTGTCTTCAATGAAGACTAATTCAATTTTGCATATAGAGGAGCCAAAGAGAGATTTAGCTCTGTATTTGTG
GTATCAGTTTGGAAAAAAATCTGATACTCCATTTGATTATTGTAAATATTTGATCTTGAATCACTTGACAGTG
TTTGTGTTGAATTGIGTTTGTTTTTTCTTTGATGGGCTTAAAAGAAATTATCCAAAGGGAGAAAAGCAGTATGC
CACTTCTTAAAACAGAACAAAACAAAAAAGAAAATTGTGCTCTTTTCTAATCCAAAGGGTATATTTGCAGCATG
CTTGACTTTACCAATTCTGATGACATCTTTACGGACACTATTATCACTAAGACCTTGTATGGCGAAGTCTTTAG
TCTTTTTCATGTATTTTCTCATGATTTTTTCTTTTATGTAGTTTGACTATGCCTTACCTTTGTAAATATTTTT
GCTTGTGTTGTCGCAAAGGGGATAATCTGGGAAAGACACCAATCATGGGCTCACTTTAAAA

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FIGURE 3738

MIDTLRPVPFASEMAISKTVAWLNEQLELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRA
LFTRGEDRDRFTRRCGTDTVVLYDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLHCETN
LDGSCSSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSGSPLSNSQPSFPVEILPFLYLGC AKDSTNL
DVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHWSQNLSQFFPEAISFIDEARGKNCGLVHCLAGISRS
VTVTVAYLMQKLNLSMNDAYDIVKMKKSNI SPNFNFMGQLLDFERTLGLSSPCDNRVPAQQLYFTTPSNQNVYQV
DSLQST

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FIGURE 3739

GTCTCTCTTCTCCCTTCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCGAACAGCTGAGGAAGCTCTTCATT
GGAGGGTTGAGCTTTAAACAACCGATGAGAGCCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCACGGACTGT
GTGGTAATGAGAGATCCAAACACAGAGCACTCCAGGGGCTTTGGGTTTCATCACACATGCCACTGTGGAGGAGGTG
GATGCAGCCATGAATGCAAGGCCACATAAGGTGGATGGAAGAGTTGTGGAACCAAGAGAGCTGTCTCAAGAGAA
GATTCTCAAAGACCAGGTGCCCACTTAAGTATGAAAAAGATATTTGTTGGTGGCATTAAACAATGAAGAACAACA
CCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGAAGTCAATCATGACTCACTGAGGCAGTGCCAAGAA
AAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGACTGTCATTCAGAAATACCATACTGT
GAATGGCCACAAGTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAGAGATGGCTAGGGCTTTATCCAGCCAAAGAGG
CTGAAGTGGTTCTAGAACTTTGGCGGTGGTCGTGGAGGTGGTTTTGGCAGGAATGACAACACTGGTAGTGGAGG
AACTTCAGTGGTGGTGGTGGATATGGTGGCAGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTT
TGGAGGTGGTGGAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGG
AACTTTGGAGGCAGAAGCCCTGGCCCTATGGTGGTGGAGGCCAATACTTTGCCAAACCATGAAACCAAGGTGG
CTATGGTGGTTCCAGTAGCAGCAGTAGCTATGGCAATGGCAGAAGATTTTAATTAGGAAACAAAGCTTAGCAGGA
GAGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTGTGAAGTCAAGCCAGCACAGTGGTGGCA
GGGCCTAGCTGCTACAAAGAAGACCTGTTTTAGACAAATACTCATGGGTATGGGCAAAAAAGTCTGAGGACTGTAT
TTGTGACTAATTGTATAACAAGTCATTTTAGTTTCTGTTCTGTGGAAAGTGTAAGCATTCCAACAAAGGGTTTC
AATGTAGATTTTTTTTTTTTTTTTGGCAACATGCTGTTGATTGCTAAATGTAAGTCTGATCATGATGCAGAATAAA
TGTCTTTTTTTT

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FIGURE 3740

TTTAACTGTGCTATGGAGTAGAAGCAGGAGGTTTTCAACCTAGTCACAGAGCAGCACCTACCCCCCTCCTCCTTTC
CACACCTGCAAACCTCTTTTACTTGGGCTGAATATTTAGTGTAATTACATCTCAGCTTTGAGGGCTCCTGTGGCAA
ATTCCCGGATTAAAAGGTTCCCTGGTTGTGAAAATACATGAGATAAAATCATGAAGGCCACTATCATCCTCCTTCT
GCTTGCACAAGTTTCCCTGGGCTGGACCGTTTTCAACAGAGAGGGCTTATTGACTTTATGCTAGAAGATGAGGCTTC
TGGGATAGGCCCAGAAGTTCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCCAGTGTGCCCTTCCGCTGTCA
ATGCCATCTTCGAGTGGTCCAGTGTTCTGATTTGGGTCTGGACAAAGTGCCAAAGGATCTTCCCCCTGACACAAC
TCTGCTAGACCTGCAAAACAACAAAATAACCGAAATCAAAGATGGAGACTTTAAGAACCTGAAGAACCTTCACGC
ATTGATTCTTGTCAACAATAAAATTAGCAAAGTTAGTCCTGGAGCATTACACCTTTGGTGAAGTTGGAACGACT
TTATCTGTCCAAGAATCAGCTGAAGGAATTGCCAGAAAAATGCCAAAACCTCTTCAGGAGCTGCGTGCCCATGA
GAATGAGATCACCAAAGTGCGAAAAGTTACTTTCAATGGACTGAACCAGATGATTGTCATAGAAGTGGGCACCAA
TCCGCTGAAGAGCTCAGGAATTGAAAATGGGGCTTTCCAGGGAATGAAGAAGCTCTCCTACATCCGCATTGCTGA
TACCAATATCACCAGCATTCTCAAGGCTTCTCCTCCTTCCCTTACGGAATTACATCTTGATGGCAACAAAATCAG
CAGAGTTGATGCAGCTAGCCTGAAAGGACTGAATAATTTGGCTAAGTTGGGATTGAGTTTCAACAGCATCTCTGC
TGTTGACAATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAGCTTCACTTGGACAACAACAAGCTTACCAGAGT
ACCTGGTGGGCTGGCAGAGCATAAGTACATCCAGGTTGTCTACCTTCATAACAACAATATCTCTGTAGTTGGATC
AAGTGACTTCTGCCCACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGTGTGAGTCTTTTCAGCAACCCGGT
CCAGTACTGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCTGCCATTCAACTCGGAAACTATAA
GTAAATTCTCAAGAAAGCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATGTCATTGCTAAAAATAAATAAAA
GCTAGATACTGGAAACCTAACTGCAATGTGGATGTTTTACCCACATGACTTATTATGCATAAAGCCAAATTTCCA
GTTTAAGTAATTGCCTACAATAAAAAAGAAATTTGCCTGCCATTTTCAGAATCATCTTTGAAGCTTTCTGTGGA
TGTTAACTGAGCTACTAGAGATATTCTTATTTCACTAAATGTAAAATTTGGAGTAAATATATATGTCAATATTTA
GTAAAGCTTTTCTTTTTTAATTTCCAGGAAAAATAAAAAGAGTATGAGTCTTCTGTAATTCATTGAGCAGTTAG
CTGATTTGAGATAAAGTCAAATGCCAAACACTAGCTCTGTATTAATCCCATCATTACTGGTAAAGCCTCATTTG
AATGTGTGAATTCAATACAGGCTATG

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FIGURE 3741

MKATIILLLLAQVSWAGPFQQRGLDFMLEDASGIGPEVPDDRDFEPSLGPVCPFRQCCHLRVVQCSDLGLDKV
PKDLPPDTLLDLQNNKITEIKDGD FKNLKNLHALILVNNKISKVSPGAFTPLVKLERLYLSKNQLKELPEKMPK
TLQELRAHENEITKVRKVTFNGLNQMI VIELGTNPLKSSGIENGAFQGMKKLSYIRIADTNITSIPQGLPPSLTE
LHLDGNKISRVDAA SLKGLNNLAKLGLSFNSISAVDNGSLANTPHLRELHLDNNKLTRVPGGLAEHKYIQVVYLH
NNNISVVGSSDFCPPGHNTKKASYSGVSLFSNPVQYWEIQPSTFRVCVYVRS AIQLGNYK

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FIGURE 3742

AAAGCAGCATCTTGCCTGGATGAGCCAGGGGACACAGAAGAGAAGCCCACTATCTCATTTAATCTTTACAACCTCT
CTTGCAAGGGTTCCCTGGTTGTGAAAATACATGAGATAAATCATGAAGGCCACTATCATCCTCCTTCTGCTTGCA
CAAGTTTCCTGGGCTGGACCGTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAGATGAGGCTTCTGGGATA
GGCCCAGAAGTTCTTGATGACCGCGACTTCGAGCCCTCCCTAGGCCCACTGTGCCCCCTTCCGCTGTCAATGCCAT
CTTCGAGTGGTCCAGTGTTCTGATTGGGTCTGGACAAAGTGCCAAAGGATCTTCCCCCTGACACAACCTCTGCTA
GACCTGCAAAAACAACAAAAAATACCGAAATCAAAGATGGAGACTTTAAGAACCTGAAGAACCTTCACGCATTGATT
CTTGTCAACAATAAAATTAGCAAAGTTAGTCCTGGAGCATTTACACCTTTGGTGAAGTTGGAACGACTTTATCTG
TCCAAGAATCAGCTGAAGGAATTGCCAGAAAAAATGCCCAAACTCTTCAGGAGCTGCGTGCCCATGAGAATGAG
ATCACCAAAGTGCGAAAAGTTACTTTCAATGGACTGAACCAGATGATTGTCATAGAAGTGGGCACCAATCCGCTG
AAGAGCTCAGGAATTGAAAATGGGGCTTTCCAGGGAATGAAGAAGCTCTCCTACATCCGCATTGCTGATACCAAT
ATCACCAGCATTCTCAAGGTCTTCCTCCTTCCCTTACGGAATTACATCTTGATGGCAACAAAATCAGCAGAGTT
GATGCAGCTAGCCTGAAAGGACTGAATAATTTGGCTAAGTTGGGATTGAGTTTCAACAGCATCTCTGCTGTTGAC
AATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAGCTTCACCTGGACAACAACAAGCTTACCAGAGTACCTGGT
GGGCTGGCAGAGCATAAGTACATCCAGGTTGTCTACCTTCATAACAACAATATCTCTGTAGTTGGATCAAGTGAC
TTCTGCCCACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGTGTGAGTCTTTTCAGCAACCCGGTCCAGTAC
TGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCTGCCATTCAACTCGGAACTATAAGTAATTC
TCAAGAAAGCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATGTCATTGCTAAAAAATAAATAAAAGCTAGAT
ACTGGAAACCTAACTGCAATGTGGATGTTTTACCCACATGACTTATTATGCATAAAGCCAAATTTCCAGTTTAAG
TAATTGCCTACAATAAAAAGAAATTTGCCTGCCATTTTCAGAATCATCTTTTGAAGCTTTCTGTTGATGTTAAC
TGAGCTACTAGAGATATTCTTATTTCACTAAATGTAAAATTTGGAGTAAATATATATGTCAATATTTAGTAAAGC
TTTTCTTTTTTAATTTCCAGGAAAAAATAAAAAGAGTATGAGTCTTCTGTAATTCATTGAGCAGTTAGCTCATTT
GAGATAAAGTCAAATGCCAAACACTAGCTCTGTATTAATCCCCATCATTACTGGTAAAGCCTCATTTGAATGTGT
GAATTCAATACAGGCTATG

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FIGURE 3743

MKATIILLLLAQVSWAGPFQQRGLFDFMLEDEASGIGPEVPDDRDFEPSLGPVCPFRCQCHLRVVQCSDLGLDKV
PKDLPPDPTLLDLQNNKITEIKDGDGFKNLKLNHALILVNNKISKVSPGAFTPLVKLERLYLSKNQLKELPEKMPK
TLQELRAHENEITKVRKVTFNGLNQMIIVIELGTNPLKSSGIENGAFQGMKKLSYIRIADTNITSIPQGLPPSLTE
LHLDGNKISRVDAAASLKGLNNLAKLGLSFNSISAVDNGSLANTPHLRELHLDNNKLTRVPGGLAEHKYIQVVYLH
NNNISVVGSSDFCPPGHNTKKASYSGVSLFSNPVQYWEIQPSTFRCVYVRSATQLGNYK

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FIGURE 3744

GTTCCCTGGTTGTGAAAATACATGAGATAAAATCATGAAGGCCACTATCATCCTCCTTCTGCTTGCACAAGTTTCC
TGGGCTGGACCGTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAGATGAGGCTTCTGGGATAGGCCAGAA
GTTCCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCAGTGTGCCCTTCCGCTGTCAATGCCATCTTCGAGTG
GTCCAGTGTTCTGATTTGGAAGTGGGCACCAATCCGCTGAAGAGCTCAGGAATTGAAAATGGGGCTTCCAGGGA
ATGAAGAAGCTCTCTACATCCGCATTGCTGATACCAATATCACCAGCATTCCTCAAGGTCTTCTCCTTCCCTT
ACGGAATTACATCTTGATGGCAACAAAATCAGCAGAGTTGATGCAGCTAGCCTGAAAGGACTGAATAATTGGCT
AAGTTGGGATTGAGTTTCAACAGCATCTCTGCTGTTGACAATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAG
CTTCACCTGGACAACAACAAGCTTACCAGAGTACCTGGTGGGCTGGCAGAGCATAAGTACATCCAGGTTGTCTAC
CTTCATAACAACAATATCTCTGTAGTTGGATCAAGTGACTTCTGCCCACCTGGACACAACACCAAAAAGGCTTCT
TATTCGGGTGTGAGTCTTTTCAGCAACCCGGTCCAGTACTGGGAGATACAGCCATCCACCTTCAGATGTGTCTAC
GTGCGCTCTGCCATTCAACTCGGAACTATAAGTAATTCTCAAGAAAGCCCTCATTTTATAACCTGGCAAAATC
TTGTTAATGTCAATTGCTAAAAATAAATAAAAGCTAGATACTGGAAACCTAACTGCAATGTGGATGTTTTACCCA
CATGACTTATTATGCATAAAGCCAAATTTCCAGTTTAAGTAATTGCCTACAATAAAAAGAAATTTGCCTGCCAT
TTTCAGAATCATCTTTTGAAGCTTTCTGTTGATGTTAACTGAGCTACTAGAGATATTCTTATTTCACTAAATGTA
AAATTTGGAGTAAATATATATGTCAATATTTAGTAAAGCTTTTCTTTTTTAATTTCCAGGAAAAATAAAAAGAG
TATGAGTCTTCTGTAATTCATTGAGCAGTTAGCTCATTGAGATAAAGTCAAATGCCAAACACTAGCTCTGTATT
AATCCCCATCATTACTGGTAAAGCCTCATTTGAATGTGTGAATTCATACAGGCTATG

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FIGURE 3745

MKATIILLLLAQVSWAGPFQQRGLFDFMLEDEASGIGPEVPDDRDFEPSLGPVCPFRQCCHLRVVQCSDLELGTN
PLKSSGIENGAFQGMKKLSYIRIADTNITSIPQGLPPSLTELHLDGNKISRVDAAASLKGLNNLAKLGLSFNSISA
VDNGSLANTPHLRELHLDNNKLTRVPGGLAEHKYIQVVYLHNNNISVVGSSDFCPPGHNTKKASYSGVSLFSNPV
QYWEIQPSTFRCVYVRSAILQLGNYK

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FIGURE 3746

GTTCCCTGGTTGTGAAAATACATGAGATAAATCATGAAGGCCACTATCATCCTCCTTCTGCTTGCACAAGTTTCC
TGGGCTGGACCGTTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAGATGAGGCTTCTGGGATAGGCCCAGAA
GTTCCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCCAGTGTGCCCCCTCCGCTGTCAATGCCATCTTCGAGTG
GTCCAGTGTTCTGATTTGGGCTTTCCTCCTTCCCTTACGGAATTACATCTTGATGGCAACAAAATCAGCAGAGTT
GATGCAGCTAGCCTGAAAGGACTGAATAATTTGGCTAAGTTGGGATTGAGTTTCAACAGCATCTCTGCTGTTGAC
AATGGCTCTCTGGCCAACACGCCTCATCTGAGGGAGCTTCACTTGGACAACAACAAGCTTACCAGAGTACCTGGT
GGGCTGGCAGAGCATAAGTACATCCAGGTTGTCTACCTTCATAACAACAATATCTCTGTAGTTGGATCAAGTGAC
TTCTGCCCACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGTGTGAGTCTTTTCAGCAACCCGGTCCAGTAC
TGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCTGCCATTCAACTCGGAAACTATAAGTAATTC
TCAAGAAAGCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATGTCATTGCTAAAAAATAAATAAAAGCTAGAT
ACTGGAAACCTAACTGCAATGTGGATGTTTTACCCACATGACTTATTATGCATAAAGCCAAATTTCCAGTTTAAG
TAATTGCCTACAATAAAAAGAAATTTTGCCTGCCATTTTCAGAATCATCTTTTGAAGCTTCTGTTGATGTTAAC
TGAGCTACTAGAGATATTCTTATTTCACTAAATGTAAATTTGGAGTAAATATATATGTCAATATTTAGTAAAGC
TTTTCTTTTTTAATTTCCAGGAAAAAATAAAAAGAGTATGAGTCTTCTGTAATTCATTGAGCAGTTAGCTCATT
GAGATAAAGTCAAATGCCAAACACTAGCTCTGTATTAATCCCCATCATTACTGGTAAAGCCTCATTGAAATGTGT
GAATTCAATACAGGCTATG

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FIGURE 3747

MKATIILLLLLAQVSWAGPFQQRGLFDFMLEDEASGIGPEVPDDRDFEPSLGPVCPFRQCCHLRVVQCSDLGLPPS
LTELHLDGNKISRVDAAASLKGLNNLAKLGLSFNSISAVDNGSLANTPHIRELHLDNNKLTRVPGGLAEHKYIQVV
YLHNNNISVVGSSDFCPPGHNTKKASYSGVSLFSNPVQYWEIQPSTFRVCVYVRSIAIQLGNYK

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FIGURE 3748

GTTCCCTGGTTGTGAAAATACATGAGATAAATCATGAAGGCCACTATCATCCTCCTTCTGCTTGACACAAGTTTCC
TGGGCTGGACCGTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAGATGAGGCTTCTGGGATAGGCCCAGAA
GTTCCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCAGTGTGCCCTTCCGCTGTCAATGCCATCTTCGAGTG
GTCCAGTGTTCTGATTTGGGTTGTCTACCTTCATTAACAACAATATCTCTGTAGTTGGATCAAGTGACTTCTGCCC
ACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGTGTGAGTCTTTTCAGCAACCCGGTCCAGTACTGGGAGAT
ACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCTGCCATTCAACTCGGAACTATAAGTAATTCTCAAGAAA
GCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATGTCATTGCTAAAAATAAATAAAAGCTAGATACTGGAAA
CCTAACTGCAATGTGGATGTTTTACCCACATGACTTATTATGCATAAAGCCAAATTTCCAGTTTAAGTAATTGCC
TACAATAAAAAGAAATTTTGCCTGCCATTTTCAGAATCATCTTTTGAAGCTTCTGTTGATGTTAACTGAGCTAC
TAGAGATATTCTTATTTCACTAAATGTAAATTTGGAGTAAATATATATGTCAATATTTAGTAAAGCTTTTCTTT
TTTAATTTCCAGGAAAAATAAAAAGAGTATGAGTCTTCTGTAATTCATTGAGCAGTTAGCTCATTGAGATAAA
GTCAAATGCCAAACACTAGCTCTGTATTAATCCCATCATTACTGGTAAAGCCTCATTGAATGTGTGAATTCAA
TACAGGCTATG

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FIGURE 3749

MKATIILLLLAQVSWAGPFQQRGLFDFMLEDEASGIGPEVPDDRDFEPSLGPVCPFRQCCHLRVVQCSDLGCLPS

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FIGURE 3750

GTTCCCTGGTTGTGAAAATACATGAGATAAAATCATGAAGGCCACTATCATCCTCCTTCTGCTTGCACAAGTTTCC
TGGGCTGGACCGTTTCAACAGAGAGGCTTATTTGACTTTATGCTAGAAAGATGAGGCTTCTGGGATAGGCCAGAA
GTTCCCTGATGACCGCGACTTCGAGCCCTCCCTAGGCCAGTGCGCCCTTCCGCTGTCAATGCCATCTTCGAGTG
GTCCAGTGTCTGATTTGGGTCTGGACAAAGTGCCAAAGGATCTTCCCCCTGACACAACCTCTGCTAGACCTGCAA
AACAACAAAATAACCGAAATCAAAGATGGAGACTTTAAGAACCTGAAGAACCTTCACGTTGTCTACCTTCATAAC
AACAATATCTCTGTAGTTGGATCAAGTGACTTCTGCCCACCTGGACACAACACCAAAAAGGCTTCTTATTCGGGT
GTGAGTCTTTTCAGCAACCCGGTCCAGTACTGGGAGATACAGCCATCCACCTTCAGATGTGTCTACGTGCGCTCT
GCCATTCAACTCGGAAACTATAAGTAAATTCTCAAGAAAGCCCTCATTTTTATAACCTGGCAAAATCTTGTTAATG
TCATTGCTAAAAAATAAATAAAAGCTAGATACTGGAACCTAACTGCAATGTGGATGTTTTACCCACATGACTTA
TTATGCATAAAGCCAAATTTCCAGTTTAAAGTAATTGCCTACAATAAAAAGAAATTTTGCTGCCATTTTCAGAAT
CATCTTTTGAAGCTTTCTGTTGATGTAACTGAGCTACTAGAGATATTCTTATTTCACTAAATGTAAAATTTGGA
GTAAATATATATGTCAATATTTAGTAAAGCTTTTCTTTTTTAATTTCCAGGAAAAAATAAAAAGAGTATGAGTCT
TCTGTAATTCATTGAGCAGTTAGCTCATTGAGATAAAGTCAAATGCCAAACACTAGCTCTGTATTAATCCCCAT
CATTACTGGTAAAGCCTCATTTGAATGTGTGAATCAATACAGGCTATG

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FIGURE 3751

MKATIILLLLLAQVSWAGPFQQRGLFDFMLEDEASGIGPEVPDDRDFEPSLGPVCPFRCQCHLRVVQCSDLGLDKV
PKDLPPDTTLLDLQNNKITEIKDGDGFKNLKLNHVVYLHNNNISVVGSSDFCPPGHNTKKASYSGVSLFSNPVQYW
EIQPSTFRCVYVRSAILGNYK

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FIGURE 3752

GTATCACTCAGAATCTGGCAGCCAGTTCCGTCCTGACAGAGTTTCACAGCATATATTGGTGGATTCTTGTCCATAG
TGCACTCTGCTTTAAGAATTAACGAAAGCAGTGTCAAGACAGTAAGGATTCAAACCATTTGCCAAAAATGAGTCTA
AGTGCATTTACTCTCTTCCCTGGCATTGATTGGTGGTACCAGTGGCCAGTACTATGATTATGATTTTCCCTATCA
ATTTATGGGCAATCATCACCAAAGTGTGCACCAGAATGTAAGTGCCTGAAAGCTACCCAAGTGCCATGTACTGT
GATGAGCTGAAATTGAAAAGTGTACCAATGGTGCCTCCTGGAATCAAGTATCTTTACCTTAGGAATAACCAGATT
GACCATATTGATGAAAAGGCCCTTTGAGAATGTAAGTGTGAGTGGCTCATTCTAGATCACAACTTCTAGAA
AACTCCAAGATAAAAGGGAGAGTTTTCTCTAAATTGAAACAAGTGAAGAAGCTGCATATAAACCAACAACCTG
ACAGAGTCTGTGGGCCCACTTCCCAAATCTCTGGAGGATCTGCAGCTTACTCATAACAAGATCACAAAGCTGGGC
TCTTTTGAAGGATTGGTAAACCTGACCTTCATCCATCTCCAGCACAAATCGGCTGAAAGAGGATGCTGTTTCAGCT
GCTTTTAAAGGTCTTAAATCACTCGAATACCTTGACTTGAGCTTCAATCAGATAGCCAGACTGCCTTCTGGTCTC
CCTGTCTCTCTTCTAACTCTCTACTTAGACAACAATAAGATCAGCAACATCCCTGATGAGTATTTCAAGCGTTT
AATGCATTGCAGTATCTGCGTTTATCTCACAACGAAGCTGGCTGATAGTGAATACCTGGAAATTCTTTCAATGTG
TCATCCCTGGTTGAGCTGGATCTGTCTATAACAAGCTTAAAAACATACCAACTGTCAATGAAAACCTTGAAAC
TATTACCTGGAGGTCAATCAACTTGAGAAGTTTGACATAAAGAGCTTCTGCAAGATCCTGGGGCCATTATCCTAC
TCCAAGATCAAGCATTGCGTTTGGATGGCAATCGCATCTCAGAAACCAGTCTTCCACCGGATATGTATGAATGT
CTACGTGTTGCTAACGAAGTCACTCTTAATTAATATCTGTATCCTGGAACAATATTTTATGGTTATGTTTTCTG
TGTGTCAGTTTTCATAGTATCCATATTTTATTACTGTTTATTACTTCCATGAATTTTAAATCTGAGGGAAATGT
TTTGTAACATTTATTTTTTTTTTAAAGAAAAGATGAAAGGCAGGCCTATTTTCATCACAAGAACACACATATACA
CGAATAGACATCAAACCTCAATGCTTTATTTGTAAATTTAGTGTTTTTTTTATTTCTACTGTCAAATGATGTGCAAA
ACCTTTTACTGGTTGCATGGAAATCAGCCAAGTTTTATAATCCTTAAATCTTAATGTTTCTCAAAGCTTGGATTA
AATACATATGGATGTTACTCTCTTGCACCAAATTATCTTGATACATTCAAATTTGTCTGGTTAAAAAATAGGTGG
TAGATATTGAGGCCAAGAATATTGCAAAATACATGAAGCTTCATGCACTTAAAGAAGTATTTTTAGAATAAGAAT
TTGCATACTTACCTAGTGAAACTTTTCTAGAATTATTTTCTACTCTAAGTCATGTATGTTTCTCTTTGATTATTT
GCATGTTATGTTTAAATAAGCTACTAGCAAAATAAAACATAGCAAATGAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

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FIGURE 3753

MSLSAFTLFLALIGGTSGQYYDYDFPLSIYGQSSPNCAPCNCPEPSAMYCDELKLKSVPMVPPGIKYLYLRN
NQIDHIDEKAFENVTDLQWLILDHNLLNSKIKGRVFSKLKQLKKLHINHNNLTESVGPLPKSLEDLQLTHNKIT
KLGSFEGLVNLTFIHLQHNRKEDAVSAAFKGKLSLEYLDLSFNQIARLPVSLTLYLDNNKISNIPDEYF
KRFNALQYLRLSHNELADSGIPGNSFNVSSLVELDLSYNKLKNIPTVNENLENYYLEVNQLEKFDIKSFCKILGP
LSYSKIKHLRLDGNRISETSLPPDMYECLRVA NEVTIN

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FIGURE 3754

GCAGAACAAAGAATACTCCACTTTTGATAGATGGGGTTACCAGGATTCAGGCTACATGGCCTGAGGCAAGGTCAC
AACATGAGTGACAGAATGTGTCTGGAAGCCAGGCATCCTCTGGGGTGTATTTGGGGCGCTCAACAAGGCTTGAT
CGAGCTTTGGGGGTAGATCTAGCTATTCCATGGGGATTCTTTTCAGAATTGCTGTTTTCGGTAACATAATTCCATG
ACCAGGTCCATGGCATTGGATGACATTGCGCTACACTGTTGCTCACCCGGGTCACCCGTCCTCACAGGTTGGATG
GCAAGCATGTTGTGTTTCGGTCACGTCAAAGAGGGCATGGACGTCGTGAAGAAAAATAGAATCTTTTCGGCTCTAAG
AGTGGGAGGACATCCAAGAAGATTGTCATCACAGACTGTGGCCAGTTGAGCTAATCTGTGGCCCAGGGTGCTGGC
ATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTGGCCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATAC
GTGTGCCCCTCCACTGTCACAGTGTGCCTGAGGAAGGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCAC
ATTGCTTCCTAATACCCACCCTTCCTCACGACCTCATTCTGGGCATCTTGTGGACATGATGTCACCCACCCCT
TGTCAGCATTGCCTGTGATTGCCAGCCAGATTCATCTGTGCCTTGACATGGTGATGGTGATGGGTTGCCAT
CCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAGTCAGTTTGCAAAAGGACTCTAATACCTGTTTAATATTG
TCTTCCTAATTGGGATAAATTAATTAACAAGATTGACTAGAAAGTGAAGTGAACACTAACTTCCCCGTGCTGTG
GTGTGACCTGAGTTGGTGACACAGGCCACAGACCCAGAGCTTGGCTTTTGAAACACAACCTCAGGGCTTTTGTGA
AGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTGTGAAGCCTGTTGGTTTGCTGCTGCTGCTTTTGGAGGAGG
CCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAACCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTG
TTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCCGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTCTGTG
TGTTAAAGAAATCAATCTACTCATGATGTGTTATGCATAAAACATTTCTGGAACATGGATTTGTGTTACCTTA
AATGTGAAAATAAATCCTATTTTCTATGG

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FIGURE 3755

GGATTGAAACAAGATGGCGGGTTCGTGGTGAGAAGCCGTCAAGGAGTAGAAATTGGTATGCTTAGAAGCAGATTCT
TAAAAGCAGTTTCTCTTCAGAACATCTTTTTTTCATACCACCTTGATAAGCATCTTGAAACACCAATGCTGTAGCTG
CAGTAAAATGGGTGATGTCAAAGAGAACTATCTTGAAACATTTATTTCCAGTCCAAAATGGAGCTTTATATTGTG
TTTGTCAATAATCTACGTATTCTCCTCTACCAGATGACTATAATTGCAACGTAGAGCTTGCTCTGACTTCTGATG
GCAGGACAATAGTATGCTACCACCCTTCTGTGGACATTCCATATGAACACACAAAACCTATCCCTCGGCCAGATC
CTGTGCATAATAATGAAGAAACACATGATCAAGTGCTGAAAACCAGATTGGAAGAAAAAGTTGAACACCTTGAGG
AAGGACCTATGATAGAACAACCTTAGCAAAATGTTCTTTACTACTAAGCACCGTTGGTATCCTCATGGACGGTATC
ACAGATGTCGTAAGAATCTGAATCCTCCAAAAGACAGATGATGCGGAGGTTCTGGGGGAATCAAAGAGAAATGT
GCCTCATTTGCCATTTGAGAAAATGCAGTCTGGTGTATTTCAGTAATATATAGTAAAGTAATAATGATAAAATATC
TTTTCATATATTAGAATGTGTACTTTTATATAAAGTAATTCTGGATTTGACATTCTCATTTAGAGAAACCTATTT
TCTTTTTTCTTTTTCTATTTTAGTGTTCATTTATGTGCGGTCTCCAATTTAGGACTTTTCCATAGTGCCAAAGC
CATACATATTTCAGTAGAACATCAATAAATTACATCAGAAATTCAACACTTTATTATAAAACGGGCTTCGTGTTAG
ATAATTTTGCTAAACAGTAGGCTACTGTAAGTGTTCTGAGCATATTTAAGACAGGCTAGCATTTTCAATTTACAA
TATTTTCACTGATAGTAGGTTTATTGGGATGTAACCCTATGATAAGTTGAGAAACATCTCTTTTTGTGTGTCTA
CTGTGATTTAAGTATTTTAAATCATCAGCCAAGCATTGTTAGTAGTATAAATATGATTAATAAAAAATGTGCATGG
CTTTCCT

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FIGURE 3756

MAVA AVK WVM SKRT ILKHLFPVQNGALYCVCHKSTYSPLPDDYN CNVELALTSDGRTIVCYHPSVDIPYEHTKPI
PRDPVHNNEETHDQVLKTRLEEKVEHLEEGPMIEQLSKMFFTTKHRWYPHGRYHRCRKNLNPPKDR

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FIGURE 3757

AGCCGCGGCCTCAACTAAAAGTGGCCATTGACCTTTCAAGCTTTCGAGCAGTGATGCAATAGAATAGTATTTCAA
AGAAAAATGCTTATCGAAATTTTGGATCCGGTTTTCCCGTGATTGTTAAGGGTTTCTTTTAAAAAGTAGGTCACA
TTTCAAGTAGGTTCATATTTCCGGGGGCGGGTGCGCAGACAAGGAGATGAGTTTCCACTAAGGCCAGGGGGCCTCCA
ACGGGGTTGGAGGTGAGAATCCCAGGTAGGGTAGAGGTGCCGAGATCCTTCCGAATCCCAGCCCTGGGGCGTCAG
CCCTGCAGGGAATGGCAGAGACACTCTCCGGACTGAGGGAACCGAGGCCAGTCACCAAGCCCCCTCCGGGCGCGC
AGGCGATCAGTGGGTGACCGCGGCTGCGAGGGACTTTGTCTATCCGTCCCTCCAGGATCTGGGGAGAAAGAGCCCCA
TCCCTTCTCTCTCTGCCACCATTTCCGACACCCCGCAGGGACTCGTTTGGGATTTCGCACTGACTTCAAGGAAGG
ACGCGAACCCCTTCTCTGACCCAGCTCGGGCGGGCCACCTGTCTTTGCCGCGGTGACCCCTCTCTCATGACCCCTGC
GGTGCCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGGACCGCGGGGTCCGGCGAGGAGC
CATCCCCGACAGGCGGCGCGTCTGGCGAAGGCCCTGCGGGAGCTCGGTGAGACAGGATGGTACTGGGGAAGTATGA
CTGTTAATGAAGCCAAAGAGAAATTTAAAGAGGCACCAGAAGGAACCTTCTTGATTAGAGATAGCTCGCATTCAG
ACTACCTACTAACAATATCTGTTAAACATCAGCTGGACCAACTAATCTTCGAATCGAATACCAAGACGGAAAAAT
TCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAAACAATTTGACAGTGTGGTTCATCTGATCGACTACT
ATGTTTCAGATGTGCAAGGATAAGCGGACAGGTCCAGAAGCCCCCGGAACGGCACTGTTACCTTTATCTGACCA
AACCGCTCTACACGTGACACCATCTCTGCAGCATCTCTGTAGGCTCACCATTAAACAAATGTACCGGTGCCATCT
GGGACTGCCTTTACCAACAAGACTAAAAGATTACTTGAAGAATATAAAATCCAGGTATAAATGTTTCTCTTTT
TTTAAACATGTCTCACATAGAGTATCTCCGAATGCAGCTATGTAAAAGAGAACCAAAACCTTGAGTGCTCTGGATA
ACTATATGGAATGCTTTCTAAGAACAGCTGAAGCTAATCTAATTTAAATTTAACAGCTTGAAGAGGTAGCTAGGT
GTTTAAAGTTCCCTCCAGATACTTTTACCTGAGTGATGCTTCCCTTCCTAAGGCTGACCAAGACCTGTTGATCCTT
TTAGATTAAAAATAAAATGTCGCATGTAAAGGCTGAAGTCGCGTTTTATCAGAATGCCTTGCCCTCTTAGGTTCT
TTTCCATTATGTCAAAGGTCCAGGCTCCAGTAGGAGAGAAAGAACTCCTCATAGGAATACTGAAGAAGTGGGAAG
GAACCAAGCTGACACAGGCCTCACTGCAATTTGATATGCCTGCTGATCAGAGTCTCTTGGGCATTTTATATTTTG
CATTCTGATGTACCTAGGAGTTTTGTTAAACAGATGATGTATGTGAGTATTTATCCATTTTATGCAATTAACCA
AATCAACCAAAAAAAGTGACCATGAAGTCCTGTATTTGTCTTTTTACTACATGTAGGAACTCTCATGTGAATGAG
TACTGTAGTAATCCATTCTATGGGAGCCTTATTTTCAGAAATATTTCAAACCTGGTGCAAATGGAAAAGACTTTCTC
TTTTCTTTAAAGCTAAAGACAAGAATATCATGCTATACAGGTGCAACTCAATCCCCGTTAATAAAAAACCAATGT
AGGTATAGGCATTCTACCCCTTTGAAATAGCTGTGTCCCAACCTGTTGCCATTGATTTTTTGAAATGGCTTTAGA
AATATCCAAGTTGTCTTGAATTGTCTAACCATGGACATAAACAGTTGTCTCCCTTCTACTGTGTAGAATACTTT
GACTTAATTTTCTTCCAGATACAGGGGGATACCTGCCTGTTTTTCAAAGTGTTTATTTACTGCTGTACTATTG
ATTAGAATGTATTAAATAAAAAAACCTGATTTCT

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FIGURE 3758

MTLRCLEPSGNGGEGTRSQWGTAGSAEESPQAARLAKALRELGQTGWYWGSMTVNEAKEKLKEAPEGTFLIRDS
SHSDYLLTISVKTSAGPTNLRIEYQDGKFRLLDSIICVKSKLKQFDSVVHLIDYYVQMCKDKRTGPEAPRNGTVHL
YLTkPLYTSAPSLQHLCRLTINKCTGAIWGLPLPTRLDYLEEYKFQV

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FIGURE 3759

GGTGCCGCATCCCCAGCCCCGCCCATGGCCGCCTACAACTGGTGCTGATCCGGGCACGGCGAGAGCGCATGGAA
CCTGGAGAACCGCTTCAGCGGGCTGGTACGACGCCGACCTGAGCCCCGGCGGGCCACGAGGAGGCGAAGCGCGGCGG
GCAGGCGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACCTCAGTGACAGAGAGAGCGATCCGGACCTT
CTGGACAGTGCTAGATGCCATTGATCAGATGTGGCTGCCAGTGGTGAGGACTTGGCGCCTCAATGAGCGGCACTA
TGGGGGTCTAACCGGTCTCAATAAAGCAGAACTGCTGCAAAGCATGGTGAGGCCCAGGTGAAGATCTGGAGGCG
CTCCTATGATGTCCCACCACCTCCGATGGAGCCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCGTAGGTA
TGCAGACCTCACAGAAGATCAGCTACCCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCCCTTCTG
GAATGAAGAAATAGTTCCCCAGATCAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCTCCGGGG
CATTGTCAAGCATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCCCATTGT
CTATGAATTGGACAAGAACTTGAAGCCTATCAAGCCCATGCAGTTTCTGGGGGATGAAGAGACGGTGCGCAAAGC
CATGGAAGCTGTGGCTGCCCAGGGCAAGGCCAAGAAGTGAAGGCCGGCGGGGAGGATACTGTCCCAGGAGCACC
CTCCCTGCCCCGTCTTGTCCTCTGCCCCCTCCCACCTGCACATGTACACTGACCACATCTGTAGACATCTTGAGT
TGTAGCTGCAGATGGGGACCAGTGGCTCCCATTTTCATTTTAGCCATTTTGTGCGCTGCACCCACTCCCTTCATA
CAATCTAGTCAGAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAAGCTATGGAAAAGCTCCCCTTATCCAACAG
AGTTTAAAAGTAGTGACTTGGGTTTTTGCGAGTGCTTTGTTTACTAAGGACTTTGGGGAGGAACCATGCTAAGCC
ATGACCAGTGAGGAGAAGCAACAGAGCCTGTCTGTCCCATGAGCGGAGTCTGTCTCTGCTCTTCTGCAGTCAG
GCCACTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGGAAGACGAATGTAACTGCGTGCTGATGTGACAAC
GTTTCCTCCCTGACCCCAGAGGATCTGGCTCTAGGTTGGGATCAATCCTGAATTCGTATGTGTTAATTTACTT
TTATTAATAAAGTATAGTATATATAAATAATAACAAACAATAACCCTTCTGGGGTTTCTTGTGGCGGTTGAAATA
GTCCCACATGTGGTCATCAGAAAATAAGCCATTCCCTCATACCAATATAGGATCAGCTCCTTGACCTCTGAGGGGC
AGGAGTGCTTCCCTGGTGTGTGTATTAGAATCCCTTCCCTGCCTTGTTTCATGGCAGTGAAATGCCCTCTTGGTCCTG
TCCAAGTGTATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACCCTGCCACATGGGTCCAGTGTTTCATC
TGAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGTGATGTGCAA

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FIGURE 3760

MAAYKLVLRHGESAWNLENRFSGWYDADLSPAGHEEAKRGGQALRDAGYEFDICFTSVQKRAIRTLWTVLDAID
QMWLPVVRTWRLNERHYGGLTGLNKAETAAKHGEAQVKIWRRSYDVPPPPMEPDHPPFYSNISKDRRYADLTEDQL
PSCESLKDTIARALPFWNEEIVPQIKEGKRVLIAAHGNSLRGIVKHLEGLSEEAIMELNLPTGIPIVYELDKNLK
PIKPMQFLGDEETVRKAMEAVAAQGKAKK

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FIGURE 3761

GGCCATTTCTCTTGAAACTGCGGCTCGGGACCTGCGGTACCTGCTGTAGTCACGAGGGACGGGCGGCCTGGT
CGGCAGAGAGTAGCCTGCAACATTCGGCCGTGXXXXXXXXXAGTTTACCCCTCAATCCCAAACCTTTCCTCAATG
GACTAACAGGAAAGCCAGTGATGGTGAACTTAAGTGGGGAATGGAGTACAAGGGCTATCTGGTATCTGTAGATG
GCTACATGAACATGCAGCTTGCAAATACAGAAGAATACATAGATGGAGCTTTGCTGGACATCTGGGTGAAGTTT
TAATAAGGTGTAATAATGTCCTTTATATCAGAGGTGTGGAAGAAGAGGAAGAAGATGGGGAAATGAGAGAATAGC
ATCTTTTGTGGGGATTTTTTTTTATATATATTTCTAGACAATAAAGATTTGTTTGTTCCTCAACTTG

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FIGURE 3762

XSLPLNPKPFLNGLTGKPMVKLKWGMEYKGYLVSDGYMNMQLANTEEYIDGALSGHLGEVLIRCNNVLYIRGV
EEEEEDGEEMRE

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FIGURE 3763

CTCTATCGACGAGTCTGGTAGCTGAGCGTTGGGCTGTAGGTCGCTGTGCTGTGTGATCCCCAGAGCCATGCCCG
AGATAGTGGATACCTGTTTCGTTGGCCTCTCCGGCTTCCGCTCTGCCGGACCAAGCACCTGCACCTGCGCTGCAGCG
TCGACTTTTACTCGCCGGACGCTGACCGGGACTGCTGCTCTCACGGTCCAGTCTCAGGAGGACAATCTGCGCAGCC
TGGTTTTGGATACAAAGGACCTTACAATAGAAAAAGTAGTGATCAATGGACAAGAAGTCAAATATGCTCTTGGAG
AAAGACAAAGTTACAAGGGATCGCCAATGGAAATCTCTCTTCTATCGCTTTGAGCAAAAATCAAGAAATTGTTA
TAGAAATTTCTTTTGGAGCCTCTCCAAAATCTTCTGCTCTCCAGTGGCTCACTCCTGAACAGACTTCTGGGAAGG
AACACCCATATCTCTTTAGTCAGTGCCAGGCCATCCACTGCAGAGCAATCCTTCCTTGTGAGGACACTCCTTCTG
TGAAATTAACCTATACTGCAGAGGTGTCTGTCCCTAAAGAACTGGTGGCACTTATGAGTGCTATTTCGTGATGGAG
AAACACCTGACCCAGAAGACCCAAAGCAGGAAAATATACAAATTATCCAAAAGTTCCAATACCCTGTCTACCTGA
TTGCTTTAGTTGTTGGAGCTTTAGAAAGCAGGCAAAATGGCCCAAGAACTTTGGTGTGGTCTGAGAAAGAGCAGG
TGGAAAAGTCTGCTTATGAGTTTTCTGAGACTGAATCTATGCTTAAAAATAGCAGAAGATCTGGGAGGACCGTATG
TATGGGGACAGTATGACCTATTGGTCCTGCCACCATCCTTCCCTTATGGTGGCATGGAGAATCCTTGCCTTACTT
TTGTAACCTCCTACTCTACTGGCAGGCGACAAGTCACTCTCCAATGTCAATTGCACATGAAATATCTCATAGCTGGA
CAGGGAATCTAGTGACCAACAAAACCTGGGATCACTTTTGGTTAAATGAGGGACATACTGTGTACTTGAACGCC
ACATTTGCGGACGATTGTTTGGTGAAAAGTTCAGACATTTTAAATGCTCTGGGAGGATGGGGAGAACTACAGAATT
CGGTAAAGACATTTGGGGAGACACATCCTTTCACCAAACCTGTGGTTGATCTGACAGATATAGACCCTGATGTAG
CTTATTCTTCAGTTCCCTATGAGAAGGGCTTTGCTTTACTTTTTTACCTTGAACAACTGCTTGGAGGACCAGAGA
TTTTCTTAGGATTCTTAAAAGCTTATGTTGAGAAGTTTTCTTATAAGAGCATAACTACTGATGACTGGAAGGATT
TCCTGTATTCTTATTTTAAAGATAAGGTTGATGTTCTCAATCAAGTTGATTGGAATGCCTGGCTCTACTCTCCTG
GACTGCCCTCCATAAAGCCCAATTATGATATGACTCTGACAAATGCTTGTATTGCCCTTAAGTCAAAGATGGATTA
CTGCCAAAGAAGATGATTTAAATTCAATCAATGCCACAGACCTGAAGGATCTCTCTTCTCATCAATTGAATGAGT
TTTTAGCACAGACGCTCCAGAGGGCACCTCTTCCATGGGGCACATAAAGCGAATGCAAGAGGTGTACAACCTTCA
ATGCCATTAACAATTCTGAAATACGATTGAGATGGCTGCGGCTCTGCATTCAATCCAAGTGGGAGGACGCAATTC
CTTTGGCGCTAAAGATGGCAACTGAACAAGGAAGAAATGAAGTTTACCCGGCCCTTATTCAAGGATCTTGCTGCCT
TTGACAAATCCCATGATCAAGCTGTCCGAACCTACCAAGAGCACAAAGCAAGCATGCATCCCGTGACTGCAATGC
TGGTGGGGAAAGACTTAAAAGTGGATTAAAGACCTGCGTATTGATGATTTTAGAGATTTCTCTTTTTTAAATGGA
ATTGTAAGAAATATAAACTTCAGCTCACAAATTAAGCTGTCTTTTAGTTTTGGCTTTTTATTGTTTTGTTG
GTGATTTTACTGAAATAAAGATGAGCTACTTCTTC

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FIGURE 3764

MPEIVDTCSLASPASVCRTKHLHLRCSVDFTRRTLGTAAALTVQSQEDNLRSLVLDTKDLTIEKVINGQEVKYA
LGERQSYKGSPMEISLPIALSKNQEIVIEISFETSPKSSALQWLTPEQTSGKEHPYLFSSQCAIHCRAILPCQDT
PSVKLTYTAEVSVPKELVALMSAIRDGETDPEDPSRKIYKFIQKVPIPCYLIALVVGALERSQIGPRTLWSEK
EQVEKSAYEFSETESMLKIAEDLGOPYVWGQYDLLVLPPSFPYGGMENPCLTFVTPTLLAGDKSLSNVIAHEISH
SWTGNLVTNKTWDHFWLNEGHTVYLERHICGRLFGEKFRHFNALGGWELQNSVKTFGETHPFTKLVDLTDIDP
DVAYSSVPYEKGFALLFYLEQLLGGPEIFLGFLKAYVEKFSYKSITDDWKDFLYSYFKDKVDVLNQVDNNAWLY
SPGLPPIKPNYDMTLTNACIALSQRWITAKEDDLNSFNATDLKDLSSHQLNEFLAQTQRAPLPLGHIKRMQEVY
NFNAINNSEIRFRWLRLCIQSKWEDAIPLALKMATEQGRMKFTRPLFKDLAAFDKSHDQAVRTYQEHKASMPVPT
AMLVGKDLKVD

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FIGURE 3765

GCAACCTTTCCAAGGGAGTGGTTGTGTGATCGCCATCTTAGGGAAAAGATGTTCTCGTCCGTGGCGCACCTGGCG
CGGGCGAACCCCTTCAACACGCCACATCTGCAGCTGGTGCACGATGGTCTCGGGGACCTCCGCAGCAGCTCCCCA
GGGCCACGGGCCAGCCCCGCCGCCCTCGCAACCTGGCAGCCGCCCGCTGGAAGAGTACAGTTGTGAATTTGGC
TCCGCGAAGTATTATGCACTGTGTGGCTTTGGTGGGGTCTTAAGTTGTGGTCTGACACACACTGCTGTGGTTCCC
CTGGATTTAGTGAAATGCCGTATGCAGGTGGACCCCCAAAAGTACAAGGGCATATTTAACGGATTCTCAGTTACA
CTTAAAGAGGATGGTGTTCGTGGTTTGGCTAAAGGATGGGCTCCGACTTTCCTTGGCTACTCCATGCAGGGACTC
TGCAAGTTTGGCTTTTATGAAGTCTTTAAAGTCTTGTATAGCAATATGCTTGGAGAGGAGAATACTTATCTCTGG
CGCACATCACTATATTTGGCTGCCTCTGCCAGTGCTGAATTCTTTGCTGACATTGCCCTGGCTCCTATGGAAGCT
GCTAAGGTTCTGAATTCAAACCCAGCCAGGTTATGCCAACACTTTGAGGGATGCAGCTCCCCAAATGTATAAGGAA
GAAGGCCCTAAAAGCATTTCTACAAGGGGGTTGCTCCTCTCTGGATGAGACAGATACCATAACCATGATGAAGTTC
GCCTGCTTTGAACGTACTGTTGAAGCACTGTACAAGTTTGTGGTTCCTAAGCCCCGCAGTGAATGTTCAAAGCCA
GAGCAGCTGGTTGTAACATTTGTAGCAGGTTACATAGCTGGAGTCTTTTGTGCAATTGTTTCTCACCTGCTGAT
TCTGTGGTATCTGTGTTGAATAAAGAAAAAGGTAGCAGTGCTTCTCTGGTCCTCAAGAGACTTGGATTTAAAGGT
GTATGGAAGGGACTGTTTGCCCGTATCATCATGATTGGTACCCTGACTGCACTACAGTGGTTTATCTATGACTCC
GTGAAGGTCTACTTCAGACTTCCTCGCCCTCCTCCACCCGAGATGCCAGAGTCTCTGAAGAAGAAGCTTGGGTTA
ACTCAGTAGTTAGATCAAAGCAAATGTGGACTGAATCTGCTTGTGATCAGTGTTGAAGAAAGTGCAAAAGGAAC
TTTTATATATTTGACAGTGTAGGAAATTGTCTATTCCTGATATAATTACTGTAGTACTCTTGCTTAAGGCAAGAG
TTTCAGATTTACTGTTGAAATAAACCCAACCTCTTCATG

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FIGURE 3766

GCACACTGAAGAGTACGTCTTCGGGTCTACCCCTAATCACATAATGGCTGTGTTTAATCAGAAAGTCTGTCTCGGA
TATGATTAAAGAGTTTCGAAAAAATTGGCGTGCTCTTTGTAACCTGAGAGAACCACTCTATGTGGTGCACTC
CATGCTCTTGGCATTGCAGCTTTCTATGGCGGAGAACAAACAGTGGAGAATTTACAGTCTCTCTCAGTGATG
TTTTATTGACATGGAAATACCTTGCTCCATGAGAAATTGAACCTACCAGTTGAAAACATGGACGTGACTGACCATT
ATGAGGACGTTAGGAAGATTTATGATGATTTCTTGAAGAACAGTAATATGTTAGATCTGATTGATGTTTATCAAA
AATGTAGGGCTTTGACTTCTAATTGTGAAAATTATAACACAGTATCTCCTAGTCAACTACTGGATTTTCTGTCTG
GCAACAGTATGCAGTAGGTGATGAACTGATCTTTCTATACCAACATCACCAACAAGTAAATACAACCGTGATA
ATGAAAAGGTGCAGCTGCTAGCAAGGAAAATTATCTTTTCATATTTAAATCTGCTAGTGAAATCAAAGAATGACC
TGGCTGTGGCTTATATTCTCAATATTCCTGATAGAGGACTAGGAAGAGAAGCCTTCACTGATTTGAAACATGCTG
CTCGAGAGAAACAAATGTCTATCTTTTTGGTGGCCACGTCTTTTATTAGAACAATAGAGCTTGGAGGGAAAGGAT
ATGCACCACCACCATCAGATCCTTTAAGGACACATGTAAAGGGATTGTCTAATTTTATTAATTTCAATTGACAAAT
TAGATGAGATTCCTTGGAGAAATACCAAACCAAGCATTGCAGGGGGTCAAATACTGTCAGTGATAAAGATGCAAC
TGATTAAAGGCCAAAACAGCAGGGATCCTTTTTGCAAAGCAATAGAGGAAGTTGCTCAGGATTTGGATTTGAGGA
TAAAAATATTATCAATTCTCAAGAAGGTGTTGTAGCTCTTAGCACCCTGACATCAGTCTGCTCGGCCAAAAT
CTCATGCCATAAACCATGGTACTGCATACTGTGGCAGAGATACTGTGAAAGCCTTATTAGTTCTTTTGGACGAAG
AAGCAGCTAATGCTCCTACCAAAAACAAAGCAGAGCTTTTATATGATGAGGAAAACACAATCCATCATCATGGAA
CGTCTATTCTTACACTTTTTAGGTCTCCACACAGGTGAATAATTTCGATAAAACCCCTAAGAGAACGCATCTGTG
TGTCATGCAAGAGAAAAAATTAAGATGAAGCAAACTTAATTAGATCCCAATTTGCTTGTACTTATAAAGATG
ACTACATGATAAGCAAGGATAAATTGGAATAATGTTAATTTAGCATCAAAGCCTTTGTGTGTTCTTTACATGGAAA
ATGACCTTTCTGAGGGTGTAAATCCATCTGTTGGAAGATCAACAATTGGAACGAGTTTGGAAATGTTTCATCTGG
ACAGAAGTAAAAATGAAAAAGTATCAAGAAAATCAACCAGTCAGACAGGAAATAAAAGCTCAAAAAGGAAACAGG
TGGATTTGGATGGTGAAAATATTCTCTGTGATAATAGAAATGAACCACCTCAACATAAAAAATGCTAAAAATACCTA
AGAAATCAAATGATTCACAGAATAGATTGTACGGCAAACCTAGCTAAAGTAGCAAAAAGTAATAAATGTACTGCCA
AGGACAAGTTGATTTCTGGCCAGGCAAAGTTAACTCAGTTTTTTTAGACTATAAATTTGTGTCTTATATGCTTTAG
GTTTATGTATCTATAAACCATTACCAAAGACATGCTTAATTTTTAAGAGATCAAGGTGTAAATTATGATGATTT
ATTATTTTGGTCTACAGTGTATGTAAGGTTAGTATGTTAAGCACTGTTTTTGACTTTTTAAAAATACCTTAGATG
CAAATTTATAGGAGAAAAAACACTTTCAGATAAGAGGTGTTTGCTGGGATGGAAGAACTACCTGGCATGTAAGAA
ATATCGTCAGTCGTCCTAATGCATATTGTGACTGTTTGCAATATACTTCTGTTTATAAAAAGTATCAGTTTTACTTT
TCAGAGGATTTGTAAGAATCATTTAAATTTTCATTGAAATAAACGACAAGTCACATTG

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FIGURE 3767

ATGGCAAGCCAAGCGTTTAGAAAGTTTCTTCCACTCCTTGACCGAGTTTGGTTGAAAGGCGTGCTGCTGAAACT
GTAACCAAAGGAGGCATTATGCTTCCAGAAAAATCTCAAGGAAAATTATTGCAAGCAAGAGGTAGAGAGATTCAA
CCAGTTAGCGTGAAAGTTGGAGATAAAGTTCTTCTCCAGAATATGGAGGCACCAAAGTAGTTCTAGATGACAAG
GATTATTTCTTATTTAGAGATGGTGACATTCTTAGAAAGTACGTAGACTTGA

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FIGURE 3768

MASQAFRKFLPLLDRVLVERRAAETVTKGGIMLPEKSQGKLLQARGREIQPVSVKVGDKVLLPEYGGTKVVLDDK
DYFLFRDGDILRKYVD

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FIGURE 3769

CCGAGACCCGGCGCAAGAGAGCGCAGCCTTAGTAGGAGAGGAACGCGAGACGCGGCAGAGCGCGTTCAGCACTGA
CTTTTGCTGCTGCTTCTGCTTTTTTTTTTCTTAGAAACAAGAAGGCGCCAGCGGCAGCCTCACACGCGAGCGCCA
CGCGAGGCTCCCGAAGCCAACCCGCGAAGGGAGGAGGGGAGGGAGGAGGCGGCGTGCAGGGAGGAGAAAAAG
CATTTTCACTTTTTTTGCTCCCACTCTAAGAAGTCTCCCGGGGATTTTGTATATATTTTTTAACCTCCGTCAGGG
CTCCCGCTTCATATTTCTTTTCTTTCCCTCTCTGTTCTGCAACCAAGTTCCTCTGTGTCCCCCTCGCGGGCC
CCGCACCTCGCGTCCCGGATCGCTCTGATTCCGCGACTCCTTGGCCGCGCGTGCAGCATGAAAGCTCTGCCAAGA
TGGAGAGCGGCGGCGCCGGCCAGCAGCCCCAGCCGAGCCCCAGCAGCCCTTCTGCGCGCCGAGCCTGTTTCT
TTGCCACGGCCGAGCCGCGGCGGCGCAGCCGCGCAGCGGCAGCGCAGAGCGCGCAGCAGCAGCAGCAGCAGC
AGCAGCAGCAGCAGCAGGCGCGCGCAGCTGAGACCGGCGGCGGCGAGCGCCAGCCCTCAGGGGGCGGTCAACAAGTCAG
CGCCCCAAGCAAGTCAAGCGACAGCGCTCGTCTTCGCCCCAAGTATGCGCTGCAAACGCCGGCTCAACTTCAGCG
GCTTTGGCTACAGCCTGCCGAGCAGCAGCCGCGCGCGTGGCGCGCCGCAACGAGCGCGAGCGCAACCGCGTCA
AGTTGGTCAACCTGGGCTTTGCCACCCTTCGGGAGCAGTCCCCAACGGCGCGGCCAACAAAGAGATGAGTAAGG
TGGAGACACTGCGCTCGGCGGTGAGTACATCCGCGCGCTGCAGCAGCTGCTGGACGAGCATGACGCGGTGAGCG
CCGCCTTCCAGGCAGGCGTCTGTGCGCCACCATCTCCCCAACTACTCCAACGACTTGAACCTCCATGGCCGGCT
CGCCGGTCTCATCCTACTCGTCCGACGAGGGCTCTTACGACCCGCTCAGCCCCGAGGAGCAGGAGCTTCTCGACT
TCACCAACTGGTTCTGAGGGGCTCGGCCTGGTCAGGCTTGGTGCGAATGGACTTTGGAAGCAGGGTGATCGCAC
AACCTGCATCTTTAGTGCTTTCTTGTGAGTGGCGTTGGGAGGGGAGAAAAGGAAAAGAAAAAAGAAAGAAAG
AAGAAGAAAAGAGAAGAAGAAAAAACGAAACAGTCAACCAACCCCATCGCCAACTAAGCGAGGCATGCCTGAG
AGACATGGCTTTTCAAAAACGGGAAGCGCTCAGAACAGTATCTTTGCACTCCAATCATTACGGAGATATGAAGA
GCAACTGGGACCTGAGTCAATGCGCAAAATGCAGCTTGTGTGCAAAAGCAGTGGGCTCCTGGCAGAAGGGAGCAG
CACACGCGTTATAGTAACTCCCATCACCTCTAACACGCACAGCTGAAAGTCTTGCTCGGGTCCCTTCACCTCCT
CGCCCTTTCTTAAAGTGCAGTTCTTAGCCCTCTAGAAACGAGTTGGTGTCTTTC

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FIGURE 3770

MESSAKMESGGAGQQPQPQPQPFLPPAACFFATAAAAAAAAAAAAAQSAQQQQQQQQQQQAPQLRPAADGQPS
GGGHKSAPKQVKRQRSSPELMRCKRRLNFSGFGYSLPQQQPAAVARRNERERNRVKLVNLGFATLREHVPNGAA
NKKMSKVETLRSVEYIRALQQLLDEHDAVSAAFQAGVLSPTISPNSNDLNSMAGSPVSSYSDEGSYDPLSPE
EQELLDFTNWF

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FIGURE 3771A

GGTCGAGTCCTGAAGGAGGGCCTGATGTCTTCATCATTCTCAAATTCTTGTAAAGCTCTGCGTCGGGTGAAACCAG
ACAAAGCCGCGAGCCAGGGATGGGAGCACGCGGGGACGGCCTGCCGGCGGGGACGACAGCATTGCGCCTGGGT
GCAGCAGTGTGCGTCTCGGGGAAGGGAAGATATTTAAGGCGTGTCTGAGCAGACGGGGAGGCTTTTCCAAACCC
AGGCAGCTTCGTGGCGTGTGCGGTTTCGACCCGGTCACACAAAGCTTCAGCATGTCATGTGAGGACGGTCCGGCC
CTGGAAGGAACGCTCTCGGAATTGGCCGCGGAAACCGATCTGCCCGTTGTGTTTGTGAAACAGAGAAAAGATAGGC
GGCCATGGTCCAACCTTGAAGGCTTATCAGGAGGGCAGACTTCAAAGCTACTAAAAATGAACGGCCCTGAAGAT
CTTCCCAAGTCCTATGACTATGACCTTATCATCATTGGAGGTGGCTCAGGAGGTCTGGCAGCTGCTAAGGAGGCA
GCCCAATATGGCAAGAAGGTGATGGTCCTGGACTTTGTCACTCCCACCCCTCTTGGAACTAGATGGGGTCTCGGA
GGAACATGTGTGAATGTGGGTTGCATACCTAAAAAAGTATGCATCAAGCAGCTTTGTTAGGACAAGCCCTGCAA
GACTCTCGAAATTATGGATGGAAAGTGGAGAGACAGTTAAGCATGATTGGGACAGAATGATAGAAGCTGTACAG
AATCACATTGGCTCTTTGAATTGGGGCTACCGAGTAGCTCTGCGGGAGAAAAAGTCGTCTATGAGAATGCTTAT
GGGCAATTTATTGGTCCTCACAGGATTAAGGCAACAATAATAAAGGCAAGAAAAAATTTATTACAGCAGAGAGA
TTTCTCATTGCCACTGGTGAAAGACCACGTTACTTGGGCATCCCTGGTGACAAAGAATACTGCATCAGCAGTGAT
GATCTTTTCTCCTTGCCTTACTGCCCCGGTAAGACCCTGGTTGTTGGAGCATCCTATGTCGCTTTGGAGTGCCCT
GGATTTCTTGCTGGTATTGGTTTAGACGTCACCTGTTATGGTTAGGTCCATTCTTCTTAGAGGATTTGACCAGGAC
ATGGCCAACAAAATTGGTGAAACATGGAAGAATGGAATCAAGTTTATAAGACAGTTTCGTACCAATTAAGTT
GAACAAATTGAAGCAGGGACACCAGGCCGACTCAGAGTAGTAGCTCAGTCCACCAATAGTGAGGAAATCATTGAA
GGAGAATATAATACGGTGATGCTGGCAATAGGAAGAGATGCTTGACACAAGAAAAATTTGGCTTAGAAACCGTAGGG
GTGAAGATAAATGAAAAGACTGGAATAATACCTGTACAGATGAAGAACAGACCAATGTGCCTTACATCTATGCC
ATTGGCGATATATTGGAGGATAAGGTGGAGCTCACCCAGTTGCAATCCAGGCAGGAAGATTGCTGGCTCAGAGG
CTCTATGCAGGTTCCACTGTCAAGGTGACTATGAAAATGTTCCAACCACTGTATTTACTCCTTTGGAATATGGTG
CTTGTTGGCCTTTCTGAGGAGAAAGCTGTGGAGAAGTTTGGGGAAGAAAAATATTGAGGTTTACCATAGTTACTTTT
GGCCATTGGAATGGACGATTCCGTCAAGAGATAACAACAAATGTTATGCAAAAAATAATCTGTAATACTAAAGACA
ATGAACGTGTTGTGGGCTTTTACGTACTGGGTCCAAATGCTGGAGAAGTTACACAAGGCTTTGCAGCTGCGCTCA
AATGTGGACTGACCAAAAAGCAGCTGGACAGCACAATTGGAATCCACCCTGTCTGTGCAGAGGTATTACAAACAT
TGTCTGTGACCAAGCGCTCTGGGGCAAGCATCCTCCAGGCTGGCTGCTGAGGTTAAGCCCCAGTGTGGATGCTGT
TGCCAAGACTGCAAAACCACTGGCTCGTTTTCCGTGCCCAAATCCAAGGCGAAGTTTTCTAGAGGGTTCTGGGGCTC
TTGGCACCTGCGTGTCTGTGCTTACCACCGCCCAAGGCCCTTGGATCTCTTGGATAGGAGTTGGTGAATAGA
AGGCAGGCAGCATCACACTGGGGTCACTGACAGACTTGAAGCTGACATTTGGCAGGGCATCGAAGGGATGCATCC
ATGAAGTCACCAGTCTCAAGCCCATGTGGTAGGCGGTGATGGAACAACGTGCAATCAGTTTTAGCATGACCTTT
CCTTGTTGATTTTTCTTATTCTCGTTGTCAAGTTTTCTAGGGTTGAATTTTTTTCTTTTCTCCATGGTGTTAAT
GATATTAGAGATGAAAAACGTTAGCAGTTGATTTTTGTCCAAAGCAAGTCATGGCTAGAGTATCCATGCAAGGT
GTCTTGTTGCATGGAAGGGATAGTTTGGCTCCCTTGGAGGCTATGTAGGCTTGTCGGGGAAGAGAACTGTCTT
GCAGCTGAAATGGACTGTTCTTTACTGACCTGCTCAGCAGTTTCTTCTCATATATTCCCAAAACAAGTACATC
TGCGATCAACTCTAGCCAAATTTGCCCTGTGTGCTACATGATGGATGATTATTTTAAAGGTCTGTTTAGGAA
GGGAAATGGCTACTTGGCCAGCCATTGCCTGGCATTGGTAGTATAGTATGATTCTCACCATTATTTGTCATGGA
GGCAGACATACACCAGAAATGGGGGAGAAACAGTACATATCTTTCTGTCTTTAGTTTATGTGTGCTGGTCTAAG
CAAGCTGAGATCATTTGCAATGGAACACGTAACCTGTTTTAAAGTTTTTCTGGTAGCTTTAGCTTTATGCTAA
AAAAATAATGACATTGGGTATCTATTTCTTTCTAAGACTACATTAGTAGGAAAAATAAGTCTTTTCATGCTTATG
ATTTAGCTGTTTTGTGGTAATTGCTTTTTAAAGGAAGTTATTAATATCATAAGTTATTAATATTTGAACAC
AGGTGGATGTGAAGGATTTTCATTTAAAACCAAGTGGTTTTGACTTTTTCTGTTGAATGAACAACGTGCTTGT
TGGAATTTTTGCAGAAGTGTATGCTTTGTTAGCATTTCAACTTGCAATTATATAAGAGGTTATTAATGCCTCA
GTTATGTGTTTGTCAATGTACTGGCTGAGGATTTCTATCTCAGCTGTCTTTTCTAACTGTGTAGGTTGAGTTTGA
ACACGTGCTTGTGGACATCAGGCCTCCTGCCAGCAGTTCTTGAAGCTTCTTTTTCATTCCTGCTACTCTACCTGT
ATTTCTCAGTTGCAGCACTGAGTGGTCAAAATACATTTCTGGGCCACCTCAGGGAACCATGCATCTGCCCTGGCA
TTTAGGCAGCAGAGCCCTGACCGTCCCCACAGGGCTCTGCCTCACGTCCTCATCTCATTGGCTGTGTAAAGA
AATGGGAAAAGGGAAAAGGAGAGCAATTGAGGCAGTTGACCATATTAGTTTATTTATTTATTTTAAATTTG
TTTTTTTCTCCAAGTCCACCAGTCTCTGAAATTAGAACAGTAGGCGGTATGAGATAATCAGGCCAATCATGTTG

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FIGURE 3771B

TGATTCTCTTTTCTTAGTGGAGTGGAAATGTTCTATCCCCACAAGAAGGATTATATCTTATAGACTTGTCTTGTTT
AGATTCTGTATTTACCCATTTTATTGAAACATATACTAAGTTCCATGTATTTTGTACAAATCTTCTGAAAAA
AACAAAACAATGTGAAACATTAAAATTAAAAGGCATTATAATA

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FIGURE 3772

CTTTTGCGGGTGGCGGCGAACGCGGAGAGCACGCCATGAAGGCCTCGGGCACGCTACGAGAGTACAAGGTAGTGG
GTCGCTGCCTGCCCACCCCAAATGCCACACGCCGCCCTCTACCGCATGCGAATCTTTGCGCCTAATCATGTGCG
TCGCCAAGTCCCGCTTCTGGTACTTTGTATCTCAGTTAAAGAAGATGAAGAAGTCTTCAGGGGAGATTGTCTACT
GTGGGCAGGTGTTTGAGAAGTCCCCCTGCGGGTGAAGAACTTCAGGATCTGGCTGCGCTATGACTCCCGGAGCG
GCACCCACAACATGTACCGGGAATACCGGGACCTGACCACCGCAGGCGCTGTCACCCAGTGCTACCGAGACATGG
GTGCCCCGGCACC CGCCCCGAGCCCACTCCATT CAGATCATGAAGGTGGAGGAGATCGCGGCCAGCAAGTGCCGCC
GGCCGGCTGTCAAGCAGTTCCACGACTCCAAGATCAAGTTCCCGCTGCCCCACCGGGTCTGCGCCGTCAGCACA
AGCCACGCTTCACCACCAAGAGGCCCAACACCTTCTTCTAGGTGCAGGGCCCTCGTCCGGGTGTGCCCCAAATAA
ACTCAGGAACGCCCCGGT

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FIGURE 3773

CGCATCCCCAGCCCGCCGCCATGGCCGCCTACAAACTGGTGCTGATCCGGCACGGCGAGAGCGCATGGAACCTGG
AGAACCGCTTCAGCGGCTGGTACGACGCCGACCTGAGCCCCGGCGGGCCACGAGGAGGCGAAGCGCGGGCGGGCAGG
CGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACCTCAGTGACAGAGATCTGGAGGCGCTCCTATGATG
TCCCACCACCTCCGATGGAGCCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCGCAGGTATGCAGACCTCA
CAGAAGATCAGCTACCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCCCTTCTGGAATGAAGAAA
TAGTTCCCCAGATCAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCTCCGGGGCATTGTCAAGC
ATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCCCATTTGTCTATGAATTGG
ACAAGAACTTGAAGCCTATCAAGCCCATGCAGTTTCTGGGGGATGAGGAGACGGTGCGCAAAGCCATGGAAGCTG
TGGCTGCCCCAGGGCAAGGCCAAGAAGTGAAGGCCGGCGGGGAAGATACTGTCCCCAGGAGCACCTCCCTGCCCA
TCTTGTCCCTCTGCCCCCTCCACCTGCACATGTCACACTGACCACATCTGTAGACATCTTGAGTTGTAGCTGCAG
ATGGGGACCAAGTGGCTCCCATTTTCATTTTAGCCATTTTGTGCGCTGCACCCACTCCCTTCATACAATCTAGTCA
GAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAAGCTATGGAAAAGCTCCCCTTATCCAACAGAGTTTAAAACC
ATGCTAAGCCATGACCAGTGAGAAGAAGCAACAGAGCCTGTCTGTCCCCATGAGCGGAGTCTGTCTCTGCTCTT
CTGCAGTCAGGTCAGTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGGGAAGACGAATGTAACCTGCGTGGTGA
TGTGACAACCTGTTT

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FIGURE 3774

GTGGGCGGACCGCGCGGCTGGAGGTGTGAGGATCCGAACCCAGGGGTGGAGGCGGCTCCTGCGATCGAAGGGGAC
TTGAGACTCACCGCCGCACGCCATGAGGGCCCTGTGGGTGCTGGGCCTCTGCTGCGTCCCTGCTGACCTTCGGGT
CGGTCAGAGCTGACGATGAAGTTGATGTGGATGGTACAGTAGAAGAGGATCTGGGTAAAAGTAGAGAAGGATCAA
GGACGGATGATGAAGTAGTACAGAGAGAGGAAGAAGCTATTAGTTGGATGGATTAAATGCATCACAATAAGAG
AACTTAGAGAGAAGTCGGAAAAGTTTGCCTTCCAAGCCGAAGTTAACAGAATGATGAACTTATCATCAATTAT
TGTATAAAAATAAAGAGATTTTCTGAGAGAACTGATTTCAAATGCTTCTGATGCTTTAGATAAGATAAGGCTAA
TATCACTGACTGATGAAAATGCTCTTTCTGGAAATGAGGAACCTAACAGTCAAATTAAGTGTGATAAGGAGAAGA
ACCTGCTGCATGTCACAGACACCGGTGTAGGAATGACCAGAGAAGAGTTGGTTAAAACCTTGGTACCATAGCCA
AATCTGGGACAAGCGAGTTTTTAAACAAAATGACTGAAGCACAGGAAGATGGCCAGTCAACTTCTGAATTGATTG
GCCAGTTTGGTGTGCGTTTTCTATTCCGCCTTCTTGTAGCAGATAAGGTTATTGTCACTTCAAAACACAACAACG
ATACCCAGCACATCTGGGAGTCTGACTCCAATGAATTTTCTGTAATTGCTGACCCAAGAGGAAACACTTAGGAC
GGGGAACGACAATTACCTTGTCTTAAAGAAGAAGCATCTGATTACCTTGAATTGGATAACAATTAAGGCTCTCG
TCAAAAAATATTACAGTTTATAAACTTTCTATTTATGTATGGAGCAGCAAGACTGAACTTGTGAGAGCCCA
TGGAGGAAGAAGAAGCAGCCAAAGAAGAGAAAGAAGATCTGATGATGAAGCTGCAGTAGAGGAAGAAGAAG
AAAAGAAACCAAGACTAAAAAGTTGAAAAACTGTCTGGGACTGGGAACTTATGAATGATATCAAACCAATAT
GGCAGAGACCATCAAAAGAAGTAGAAGAAGATGAATACAAAGCTTTCTACAAATCATTTTCAAAGGAAAGTGATG
ACCCCATGGCTTATATTCACTTTACTGCTGAAGGGGAAGTTACCTTCAAATCAATTTTATTTGTACCCACATCTG
CTCCACGTGGTCTGTTTGACGAATATGGATCTAAAAAGAGCGATTACATTAAGCTCTATGTGCGCCGTGTATTCA
TCACAGACGACTTCCATGATATGATGCCTAAATACCTCAATTTTGTCAAGGGTGTGGTGGACTCAGATGATCTCC
CCTTGAATGTTTCCCGCGAGACTCTTCAGCAACATAAACTGCTTAAGGTGATTAGGAAGAAGCTTGTTCGTA
CGCTGGACATGATCAAGAAGATTGCTGATGATAAATAACAATGATACTTTTTGGAAAGAATTTGGTACCAACATCA
AGCTTGGTGTGATTGAAGACCACTCGAATCGAACAGTCTTGCTAAACTTCTTAGGTTCCAGTCTTCTCATCATC
CAACTGACATTACTAGCCTAGACCAGTATGTGGAAAGAATGAAGGAAAAACAAGACAAAATCTACTTCATGGCTG
GGTCCAGCAGAAAAGAGGCTGAATCTTCTCCATTTGTTGAGCGACTTCTGAAAAAGGGCTATGAAGTTATTTACC
TCACAGAACCTGTGGATGAATACTGTATTAGGCCCTTCCCGAATTTGATGGGAAGAGGTTCCAGAATGTTGCCA
AGGAAGGAGTGAAGTTCGATGAAAGTGAGAAACTAAGGAGAGTCTGTAAGCAGTTGAGAAAGAATTTGAGCCTC
TGCTGAATTGGATGAAAGATAAAGCCCTTAAGGACAAGATTGAAAAGGCTGTGGTGTCTCAGCGCCTGACAGAAT
CTCCGTGTGCTTTGGTGGCCAGCCAGTACGGATGGTCTGGCAACATGGAGAGAATCATGAAAGCACAAGCGTACC
AAACGGGCAAGGACATCTCTACAAATTACTATGCGAGTCAGAAGAAAAATTTGAAATTAATCCCAGACACCCGC
TGATCAGAGACATGCTTCGACGAATTAAGGAAGATGAAGATGATAAACAGTTTTGGATCTTGCTGTGGTTTTGT
TTGAAACAGCAACGCTTCGGTCAGGGTATCTTTTACCAGACACTAAAGCATATGGAGATAGAATAGAAAGAATGC
TTTCGCTCAGTTTGAACATTGACCTGATGCAAAGGTGGAAGAAGAGCCTGAAGAAGAACCTGAAGAGACAGCAG
AAGACACAACAGAAGACACAGAGCAAGACGAAGATGAAGAAATGGATGTGGGAACAGATGAAGAAGAAGAAACAG
CAAAGGAATCTACAGCTGAAAAAGATGAATTGTAAATTATACTCTCACCATTGGATCCTGTGTGGAGAGGGAAT
GTGAAATTTACATCATTTCTTTTTGGGAGAGACTTGTTTTGGATGCCCCCTAATCCCCTTCTCCCCTGCACTGTA
AAATGTGGGATTATGGGTACAGGAAAAAGTGGGTTTTTTAGTTGAATTTTTTTTAAACATTCTCATGAATGTAA
ATTTGTACTATTTAACTATTCTTGATGTAAAACTTGTGATGTGTATAAAAAATAAAAAAGATCCCAAAT

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FIGURE 3775

ATGAGCTTCACCACTCGCTCCACCTTCTCCACCAACTACCGGTCCCTGGGCTCTGTCCAGACGCCCAGCTATGGC
GCCTGGCCAGTCAGCAGTGTGGCCAGCGTCTATGCAGGCAGCAGGGGCTCTCATTCCCGGATCTCTGTGTGCTGC
TTCACCAGCTTCCGGGTTGCATGGGGAATAGGAGGCATCCAGAACGAGAAGGAGACCATGCAAAGCCTGAACGAC
TGCCTGGCCTCCTACCTGGACAGAGTGAGGAGCCTGGTGACCAAGAACCAGAAGCTGGAGAGCAAAATCCGGGAG
CACGTGGAGAAGAAGGGACCCCATGTCAGAGACTGGAGCCATTACTTCAAGATCATCGATGACCTGAGGGCTCAG
ATCTTTGCAAACACTGTGGACAATGCCTGCATCGTTCTGCAGATCGACAATGTCTGTCTTGCTGCTGATGACTTT
AGGGTCAAGTATGAGACAGAGCTGGCCATGGCCCATGACATCCATGGGCTCCGCAAGGTCATTGTTGACACCAAT
GTCACCTCGGCTGCAGCTGGAGACAGAGATTGAGGCTCTCAAGGAGGAGCTGCTCTTCATAAAGAAGAACCACAAA
GAGGAAGTAAAAGGCCTACAAGCCCAGATTGCCAGCTCTGGGTTGACCATGGAGGTAGATGCCCTTAAATCTCAG
TGCCTCGCCAAGATCATGGCAGACATCTGGGCCCAATATGACGAGCTGGCTCGGAAGAACCAAGAGGAGCTGGAC
AAATACTGGTCTCAGAAGAATGAGGAAATCGCCAAAGTGGTCACCACGCAGTCCGCCGAGGTGGAGCTGCTGAG
ATGACGCTCACAGAGCTGAGATGTACAGTCCAGTCCTTGGAGGTTGACCTGGACTCCATGAGAAGTCTGAAGGCC
AGCTTGGAGGACCGCCTGAGGGAGGTGGAGGCCCGCCACACCCTGCAGATGGAGCAGCTCAATGGGATCCTGTTG
CACCTGGAGTCAGAGCTGGCACAGACCCTGGCAGAGGGACAGTGCCAGGCCCAGGAGTACGAGGCCCTGCTGAAC
ATCAAGGTCAAGTTGGAGGCTGAGATCGCCACCTACCGCCGCTGCTGGAAGATGGCGAGGAGTTCAATCTTGGT
GATGCCCTGGACAGCAGCAACTCCATGCAAACCATCCAAAAGACCACCACTGCCGGATAG

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FIGURE 3776

MSGGGLAAGMAGGLAGIGGIQNEKETMQSLNDCLASYLDRVRSVTKNQKLESKIREHVEKKGPHVRDWSHYFKI
 IDDLRAQIFANTVDNACIVLQIDNVCLAADDFRVKYETELAMAHDIHGLRKVIVDTNVTRLQLETEIEALKEELL
 FIKKNHKEEVKGLQAQIASSGLTMEVDALKSQCLAKIMADIWAQYDELARKNQEELDKYWSQKNEEIAKVTTQS
 AEVGAAEMTLTELRC TVQSLEVDLDSMRSLKASLEDRLREVEARHTLQMEQLNGILLHLESELAQT LAEGQCQAAQ
 EYEALLNIKVKLEAEIATYRRLLLEDGEEFN LGDALDSSNSMQTIQKTTTAG

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FIGURE 3776

MSGGGLAAGMAGGLAGIGGIQNEKETMQSLNDCLASYLDRVRSVLTKNQKLESKIREHVEKKGPHVRDWSHYFKI
IDDLRAQIFANTVDNACIVLQIDNVCLAADDFRVKYETELAMAHDIHGLRKVIVDTNVTRLQLETEIEALKEELL
FIKKNHKEEVKGLQAQIASSGLTMEVDALKSQCLAKIMADIWAQYDELARKNQEELDKYWSQKNEEIAKVVTTS
AEVGAAEMTLTELRCVQSLEVDLDSMRSLKASLEDRLREVEARHTLQMEQLNGILLHLESELAQTLAGQCQQAQ
EYEALLNIKVKLEAEIATYRRLLEDGEEFNLGDALDSSNSMQTIQKTTTAG

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FIGURE 3777

CAGTGCCAGGCTGGAGGCGGCAGCGGTTGGAGGCTTCGCCCGGCTTTGCAGCGGGGACTTCGGCGGGCGGCCTC
AGGCACCTCGGCCCGGACACGATGAGGCGAGTGGTACGACAGAGCAAGTTTCGGCATGTATTTGGGCAAGCGGTG
AAAAATGACCAGTGCTATGATGACATCCGGGTTTCTCGTGTGACCTGGGATAGTTTCCTTTTGTGCTGTCAATCC
AGATTTGTTGCCATAATCATAGAGGCAAGTGGGGGAGGAGCGTTCCCTGTCTCCCTCTGCACAAGACTGGTCGA
ATTGACAAATCTTACCCTACAGTATGTGGCCACACAGGACCAGTGCTGGACATAGACTGGTGCCACATAACGAT
CAGGTCATTGCCAGCGGTTTCAGAGGACTGCACGGTCATGGTATGGCAGATCCCAGAAAATGGACTCACCCCTTTCC
CTGACTGAACCTGTGGTGATTTTGAAGGCCACTCAAAGAGAGTCGGCATCGTGGCTTGGCATCCAACGGCCCCGC
AATGTGCTTCTTAGTGACAGGCTGTGATAATGCCATTATCATCTGGAATGTGGGAACAGGGGAAGCCCTTATAAAC
TTGGACGATATGCATTAGACATGATTTACAATGTGAGCTGGAACCGGAATGGCAGTCTGATCTGCACAGCTTCC
AAAGACAAGAAAGTGAGAGTCATTGATCCCAGGAAAACAAGAGATTGTTGCTGAGAAGGAGAAAAGCACATGAAGGA
GCAAGACCCATGAGAGCCATCTTCTGGCCGATGGCAATGTCTTCACCACTGGGTTTCAGCCGCATGAGCGAGCGG
CAGCTGGCTCTCTGGAATCCGAAAAATATGCAGGAACCAATTGCTCTTCATGAGATGGACACTAGCAATGGGGTG
TTGCTGCCTTTCTATGACCCTGACACCAGCATCATTTACTTATGTGGAAGGGTGACAGCAGTATTCGCTATTTT
GAGATCACGGATGAATCCCCGTACGTCCACTACCTCAACACATTACAGCAGCAAGGAGCCTCAGAGAGGGATGGGT
TACATGCCCAAGAGGGGACTTGATGTTAAACAATGTGAGATTGCCAGATTCTTCAAACCTTCATGAGAGAAAGTGT
GAACCTATTATTATGACTGTTCCAGGAAGTCTGACCTTTTCCAAGATGACCTGTATCCTGACACAGCGGGGCCA
GAGGCCGCGCTGGAGGCGAAGAGTGGTTCGAAGGCAAGAATGCAGACCCAATCCTCATCTCCTTGAAGCACGGG
TACATTCCAGGCAAAAACAGGGATCTCAAGGTGGTCAAGAAGAACATTCTGGATAGCAAGCCCACTGCAAAACAAG
AAGTGCGACCTGATCAGCATCCCCAAGAAAACCACAGACACGGCCAGTGTCAAAATGAAGCCAAGTTGGATGAG
ATTTTAAAGAGATCAAATCTATAAAAGACACAATCTGCAATCAAGATGAGCGTATTTCCAAGTTAGAACAGCAG
ATGGCAAAGATAGCAGCCGTAAGGTCCCACCCCCACCCCTACAGAAAAAATGGGAGCAAGAACCTGTGCTTGGGA
GCTGGTTATTGGTGTGGTCTTAGGGAGGGCGGAAAGGGAGGCACTGCCATTTGGAGACATTCCATTTAGATTTG
TCAACCAGCGATAGGCCACATTCCAGTAAGAACTCAATTTGTCTCCCAAATTTGCAGAAACAAAACGTGATTTAA
AAGCTGAGCTTTTATCAGAAAGCTTTTTTGATGTTTTAAGTGTATGTGACTTGTGAACTTTTTAAAAAGTGC
TACTTTTAAATCCCAGATACTCTGAATTTTAGAAAACAACTAATCTGATTGTGTCGTGCCCAAGTACCCTTT
TTTTTTTAAATGAATAGGGACCAATGCCACATTGCTTTTATATTTCTTTCTTTTAAATGTTGCCAAAACCAAAA
GTAGCTTTGTTTTCTTTGTATTTTGCTACTTTGCAGTATTTGTGTGTGGTTTTTTTCTTTAATTTGAAAGG
GACAGCACTGTGTATGTTTATAAACTAAATGAAGATAAGATATTATTTGTATAAACATTCTGAGAACATC
AAAGCAGTAGCCACATGGTGCTGGCTCCTTTGCAGCACAAACCTGGTCATTTTGATGACTGTACAACAGGAAGAC
TTGAAAAATCACGTGGATTATATTACCACCGCTCTCATTTTCATGGAGTCTTCTGATCAAAAAGCTCACGTCTG
ATTTCTTCTTTCTTTCTTTCTTTCTAGAAATGGGTGTTTGTACCAGAATGGAATTTTGCTTCTCGGTTATCCT
GTGCTTCAGATGATTATAATCTAACCC

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FIGURE 3777

CAGTGCCAGGCTGGAGGCGGCAGCGGTTGGAGGCTTCGCCCGGCTTTGCAGCGGGGACTTCGGCGGCGGCGCCTC
AGGCACCTCGGCGCGGACACGATGAGGCGAGTGGTACGACAGAGCAAGTTTCGGCATGTATTGGGCAAGCGGTG
AAAAATGACCAGTGCTATGATGACATCCGGGTTTCTCGTGTGACCTGGGATAGTTCCCTTTTGTGCTGTCAATCCC
AGATTTGTTGCCATAATCATAGAGGCAAGTGGGGGAGGAGCGTTCCTTGTCTCCCTCTGCACAAGACTGGTCCGA
ATTGACAAATCTTACCCTACAGTATGTGGCCACACAGGACCAGTGCTGGACATAGACTGGTGCCACATAACGAT
CAGGTCATTGCCAGCGGTTTCAGAGGACTGCACGGTCATGGTATGGCAGATCCAGAAAATGGACTCACCTTTCC
CTGACTGAACCTGTGGTGATTTTGAAGGCCACTCAAAGAGAGTCCGGCATCGTGGCTTGGCATCCAACGGCCCCG
AATGTGCTTCTTAGTGACGGCTGTGATAATGCCATTATCATCTGGAATGTGGGAACAGGGGAAGCCCTTATAAAC
TTGGACGATATGCATTAGACATGATTTACAAATGTGAGCTGGAACCGGAATGGCAGTCTGATCTGCACAGCTTCC
AAAGACAAGAAAGTGAGAGTCATTGATCCCAGGAAACAAGAGATTGTTGCTGAGAAGGAGAAAGCACATGAAGGA
GCAAGACCCATGAGAGCCATCTTCTGGCCGATGGCAATGTCTTACCACCTGGGTTAGCCGCATGAGCGAGCGG
CAGCTGGCTCTCTGGAATCCGAAAAATATGCAGGAACCAATTGCTCTTTCATGAGATGGACACTAGCAATGGGGTG
TTGCTGCCTTTCTATGACCCTGACACCAGCATCATTTACTTATGTGGAAGGGTGACAGCAGTATTCGCTATTTT
GAGATCACGGATGAATCCCCGTACGTCCACTACCTCAACACATTCAGCAGCAAGGAGCCTCAGAGAGGGATGGGT
TACATGCCCAAGAGGGGACTTGATGTTAACAATGTGAGATTGCCAGATTCTTCAAACCTTCATGAGAGAAAGTG
GAACCTATTATATGACTGTTCCAGGAAGTCTGACCTTTTCCAAGATGACCTGTATCCTGACACAGCGGGGCCA
GAGGCCGCGCTGGAGGCAAGAAGTGGTTCGAAGGCAAGAATGCAGACCCAACTCCTCATCTCCTTGAAGCACGGG
TACATTCCAGGCAAAAACAGGGATCTCAAGGTGGTCAAGAAGAACATTCTGGATAGCAAGCCCACTGCAACAAG
AAGTGCGACCTGATCAGCATCCCCAAGAAAACCAAGACACGGCCAGTGTGCAAAATGAAGCCAAGTTGGATGAG
ATTTTAAAGAGATCAAATCTATAAAAGACACAATCTGCAATCAAGATGAGCGTATTTCCAAGTTAGAACAGCAG
ATGGCAAAGATAGCAGCCTGAGAGGTCCCACCCCCACCCCTACAGAAAAATGGGAGCAAGAAGTGTGCTTGGGA
GCTGGTTATTGGTGTGGTCTTAGGGAGGGCGGAAAGGGAGGCACTGCCATTTGGAGACATTCCATTTAGATTG
TCAACCAGCGATAGGCCACATTCAGTAAGAACTCAATTTGTCTCCCAAATTTGCAGAAACAAAACGTGATTTAA
AAGCTGAGCTTTTATCAGAAAGCTTTTTTGATGTTTTAAGTGTATGTGACTTGTGAACTTTTTAAAAAGTGC
TACTTTTAAATCCCAGATACTCTGAATTTTAGAAAACAACTAATTCTGATTGTGTCGTGCCAAGTACCCTTT
TTTTTTTAAATGAATAGGGACCAATGCCACATTGCTTTTTATATTCTTTCTTTTAAATGTTGCCAAAACCAAAA
GTAGCTTTGTTTTCTTTGTATTTTGCTACTTTGCAGTATTTGTGTGTGGTTTTTTTTCTTAAATTTGAAAGG
GACAGCACTGTGTATGTTTATAAACTAAATGAAGATAAGATATATTTTGTATAAACATTCTCTGAGAACAATC
AAAGCAGTAGCCACATGGTGTGGCTCCTTTCAGCACAACCTGGTCATTTTGATGACTGTACAACAGGAAGAC
TTGAAAAATCACGTGGATTATATACCACCGCTCTCATTTTCATGGAGTCTTCTGATCAAAAAGCTCACGTCTG
ATTTCTTCTTTCTTTCTTTCTTTCTAGAAAATGGGTGTTTGTACCAGAATGGAATTTTGCTTCTCGGTTATCCT
GTGCTTCAGATGATTATAATCTAACCC

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FIGURE 3778

MRRVVRQSKFRHVFGQAVKNDQCYDDIRVSRVTWDSSFCAVNPRFVAIIIEASGGGAFLVLPLHKTGRIDKSYPT
VCGHTGPFVLDIDWCPHNDQVIASGSEDCTVMVWQIPENGLTSLTEPVVILEGHSKRVGIVAWHPTARNVLLSAG
CDNAII IWNVGTGEALINLDDMHSDMIYNVSWNRNGSLICTASKDKKVRVIDPRKQEIVAEKEKAHEGARPMAI
FLADGNVFTTGF SRMSERQLALWNPKNMQEPIALHEMDTSNGVLLPFYDPDTSIIYLCGKGDSSIRYFEITDESP
YVHYLNTFSSKEPQRGMGYMPKRGLDV NKCEIARFFKLHERKCEPIIMTVPRKSDLFQDDLYPD TAGPEAALEAE
EWFEGKNADPILISLKHGYIPGKNRDLKVVKKNILDSKPTANKKCDLISIPKTTDTASVQNEAKLDEILKEIKS
IKDTICNQDERISKLEQQMAKIAA

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FIGURE 3779

ATGGCTGTAAAGCATCTTCAGAAGCATCGCCTCTGTTTCCTTCTCCTGCTGGCCAGCTACAAGTGAGCGGCACAGC
CTGCTCCATGCCACAGGCCTGCCTGCGCCCTGGGAACCATAGTAGTGACAGTCCACAAGGAGCATCCCGGCTGGG
CCCCACAACAGGCCCCCGAACTAGAGAACGTGGAACATGAGTCTCTTAGGATGAACGAGGAGCCGCTGGAGCGG
ACTCTCAGAGCGCTACCTGGCCACCAGTCTCTGGGTGGGGGTCTGGGGGCACCATGGTTTCGGCGGCAGCCCCC
AGCCTCCTCATCCTTCTGTTGCTGCTCCTGGGGTCTGTGCCTGCTACCGACGCCCCGCTCTGTGCCCCCTGAAGGCC
ACGTTCTGGAGGATGTGGCGGGTAGTGGGGAGGCCGAGGGCTCGTCGGCCTCCTCCCCGAGCCTCCCGCCACCC
TGGACCCCGGCCCTCAGCCCCACATCGATGGGGCCCCAGCCCATAAACCCTGGGGGGCCCATCACCCCCACCAAC
TTCCTGGATGGGATAGTGGACTTCTTCCGCCAGTACGTGATGCTGATTGCTGTGGTGGGCTCCCTGGCCTTTCTG
CTGATGTTTCATCGTCTGTGCCGCGGTCATCACCCGGCAGAAGCAGAAGGCCTCGGCCTATTACCCATCGTCCTTC
CCCAAGAAGAAGTACGTGGACCAGAGTGACCGGGCCGGGGCCCCCGGCCTTCAGTGAGGTCCCCGACAGAGCC
CCCGACAGCAGGCCCGAGGAAGCCCTGGATTCTTCCCGGCAGCTCCAGGCCGACATCTTGGCCGCCACCCAGAAC
CTCAAGTCCCCCACCAGGGCTGCACTGGGCGGTGGGGACGGAGCCAGGATGGTGGAGGGCAGGGGCGCAGAGGAA
GAGGAGAAGGGCAGCCAGGAGGGGGACCAGGAAGTCCAGGGACATGGGGTCCCAGTGGAGACACCAGAGGCGCAG
GAGGAGCCGTGCTCAGGGGTCTTGAGGGGGCTGTGGTGGCCGGTGAGGGCCAAGGGGAGCTGGAAGGGTCTCTC
TTGTTAGCCCAGGAAGCCCAGGGACCAGTGGGTCCCCCGAAAGCCCCTGTGCTTGCAGCAGTGTCCACCCAGT
GTCTAA

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FIGURE 3780

MVSAAAPSLILLILLLLGSPATDARSVPLKATFLEDVAGSGEAEAGSSASSPSLPPPWTPALSPTSMGPQFITLG
GPSPTNFDGIVDFFRQYVMLIAVVGSLAFLLMFIVCAAVITRQKQKASAYYPSSFPKKKYVDQSDRAGGPRAF
SEVPDRAPDSRPEEALDSSRQLQADILAATQNLKSPTRAALGGGDGARMVEGRGAEEEEKGSQEGDQEVQGHGVP
VETPEAQEEPCSGVLEGAVVAGEGQGELEGSLLLAQEAQGPVGPPEPCACSSVHPSV

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FIGURE 3781

GGGACCTTAATTCTCTTTCCCATCTTGCAAGATGCGGGTGAAAAAGTTGAGAAGCCAGATACTAAAGAGAAGAA
ACCCGAAGCCAAGAAGGTTGATGCTGGTGGCAAGGTGAAAAAGGGTAACCTCAAAGCTAAAAAGCCCAAGAAGGG
GAAGCCCCATTGCAGCCGCAACCCCTGTCCTTGTCAGAGGAATTGGCAGGTATTCCCGATCTGCCATGTATTCCAG
AAAGGCCATGTACAAGAGGAAGTACTCAGCCGCTAAATCCAAGGTTGAAAAAGAAAAAGAGGAGAAGGTTCTCGC
AACTGTTACAAAACCAAGTTGGTGGTGACAAGAACGGCGGTACCCGGGTGGTTAACTTCGCAAAATGCCTAGATA
TTATCCTACTGAAGATGTGCCTCGAAAGCTGTTGAGCCACGGCAAAAAACCCCTTCAGTCAGCACGTGAGAAAAC
GCGAGCCAGCATTACCCCCGGGACCATTCTGATCATCCTCACTGGACGCCACAGGGGCAAGAGGGTGGTTTTCT
GAAGCAGCTGGCTAGTGGCTTATTACTTGTGACTGGACCTCTGGTCCTCAATCGAGTTCCTCTACGAAGAACACA
CCAGAAATTTGTCATTGCCACTTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGC
TACTTCAAGAAGAAGAAGCTGCGGAAGCCCAGACACCAGGAAGGTGAGATCTTCGACACAGAAAAAGAGAAATA
TGAGATTACGGAGCAGCGCAAGATTGATCAGAAAGCTGTGGACTCACAAATTTTACCAAAAATCAAAGCTATTCC
TCAGCTCCAGGGCTACCTGCGATCTGTGTTTGCTCTGACGAATGGAATTTATCCTCACAAATTGGTGTCTAAAT
GTCTTAAGAACCTAATTAAATAGCTGACTACAAAAAAAAAAAAAAAAAAAA

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FIGURE 3782

MAGEKVEKPD TKEKKPEAKKVDAGGKVKKG NLKAKKP KKGKPHCSRNPVLVRGIGRYSRSAMYSRKAMYKRK YSA
AKSKVEKKKKEKVLATVTKPVGGDKNGGTRVVKL RKMPRYPTEDVPRKLLSHGKKPFSQHVRKLRASITPGTIL
IILTGRHRGKR VVFLKQLASGLLLVTGPLVLNRVPLRRTHQKFVIATSTKIDISNVKIPKHLTDAYFKKKKLRKP
RHQEGEIFDTEKEKYEITEQRKIDQKAVDSQILPKIKAIPQLQGYLRSVFALTNGIYPHKLVF

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FIGURE 3783

AGTTCACCCAGGCCCTGAACTGCCAAACAGTTACTCAACTGCTTAAGCTGGCCCACAAATACAGACAAGAGACCA
CCTGCCCTTCGAGCAGGAGTTAACACCATCACCACCTTGGTGGAGAACAAGAAAGCTCAGCTGGTGGTGATTGCA
CACGATGTGGATTCCATCGAGCTGGTTGTCTTCTTGCCCTGCCCTGTGTTGTAAATGGGAGTCCCTTACTGCATT
ATCAAGGGGAAGGCAAGACTGGGCCGTCTAGTCCACAGGAAGACCTGCACCACTGTCGCCTTCACACAGGTGAAC
TTGGAAGACAAAGGCGCTTTGGCTAAGCTGGTGGGAAGGTATCAGGACCAATGACAATGACAGATACGATGAGATC
TGCTGTCACTGGGGAGGCAATATCTTGGGTCCCAAGTCTGTGGCTTGCAATGCCAAGCTCGAAAAGGCAAAGGCT
AAAGAACTTGCCACTAACTGGGTAAATGTATACTGTTGAGTTTTCTGTACATAAAAAATAATGAAAATAATACA
AATTTTCCTT

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FIGURE 3784

MGVPYCIK GKARLGRLVHRKTCTTVAFTQVNLEDKGALAKLVEGIRTNNDNDRYDEICCHWGGNILGPKSVACIA
KLEKAKAKELATKLG

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FIGURE 3785

CGGCCGGCGATATGGCTGCCGCTGTGCCCCGCGCCGCA~~TT~~TCTCTCCCCGCTGCTTCCCCTTCTCCTGGGCTTCC
TGCTCCTCTCCGCTCCGCA~~T~~TGGCGGCAGCGGCCTGCACACCAAGGGCGCCCTTCCCCTGGATACGGTCACTTTCT
ACAAGGTCATTCCCAAAGCAAGTTCGTCTTGGTGAAGTTCGACACCCAGTACCCCTACGGTGAGAAGCAGGATG
AGTTCAAGCGTCTTGCTGAAAAC~~T~~CGGCTTCCAGCGATGATCTCTTGGTGGCAGAGGTGGGGATCTCAGATTATG
GTGACAAGCTGAACATGGAGCTGAGTGAGAAATACAAGCTGGACAAAGAGAGCTACCCAGTCTTCTACCTCTTCC
GGGATGGGGACTTTGAGAACCCAGTCCCATACACTGGGGCAGTTAAGGTTGGAGCCATCCAGCGCTGGCTGAAGG
GGCAAGGGGTCTACCTAGGTATGCCTGGTTGCCTGCCTGTATACGACGCCCTGGCCGGGGAGTTCATCAGGGCCT
CTGGTGTGGAGGCCCGCCAGGCCCTCTTGAAGCAGGGGCAAGATAACCTCTCAAGTGTGAAGGAGACTCAGAAGA
AGTGGGCCGAGCAATACCTGAAGATCATGGGGAAGATCTTAGACCAAGGGGAGGACTTCCCAGCATCAGAGATGA
CACGGATCGCCAGGCTGATTGAGAAGAACAAGATGAGTGACGGCAAGAAGGAGGAGCTCCAGAAGAGCTTAAACA
TCCTGACTGCCTTCCAGAAGAAGGGGGCCGAGAAAGAGGAGCTGTTAAAAAGGCTGTCTGTGATTTTCCAGGGTTT
GGTGGGGGTAGGGAGGGGAGAGTTAACCTGCTGGCTGTGAGTCCCTTGTGGAATATAAGGGGGTAGTGGGAACAG
TGGTACTAACCCACGATTCTGAGCCCTGAGTATGCCTGGACATTGATGCTAACATGACATGCT

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FIGURE 3786

MAAAVPRAAFLSPLLPLLLGFLLLSAPHGGSGLHTKGALPLDVTFTFYKVIPKSKFVLVKFDTQYPYGEKQDEFKR
LAENSASSDDLLVAEVGISDYGDKLNMESEKYKLDKESYPVFYLF RDGDFENPVPYTGAVKVGAIQRWLKGQGV
YLGMPGCLPVYDALAGEFIRASGVEARQALLKQGQDNLSSVKETQKKWAEQYLKIMGKILDQGEDFPASEMTRIA
RLIEKNKMSDGKKEELQKSLNILTAFQKKGAKEEL

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FIGURE 3787A

ATGGTCTTGCTTCTTTGTCTATCTTGTCTGATTTTCTCCTGTCTGACCTTTTCTGTTAAAAATCTGGGGGAAA
ATGACGGACTCCAAGCCGATCACCAGAGTAAATCAGAAGCAAACCTCATCCCGAGCCAGGAGCCCTTTCCAGCC
TCTGATAACTCAGGGGAGACACCGCAGAGAAATGGGGAGGGCCACACTCTGCCAAGACACCCAGCCAGGCCGAG
CCAGCCTCCCAAAAGGCCCAAGATGCCGGTCGGCGGAGAACTCCCTACCACCTCCACCAGAAGCCCCCA
AGAAACCCCTTCTTCCAGTGACGCAGCACCTCCCCAGAGCTTCAAGCCAACGGGACTGGGACACAAGGTCTG
GAGGCCACAGATACCAATGGCCTGTCTCTCAGCCAGGCCCCAGGGCCAGCAAGCTGGCTCCCCCTCAAAGAA
GACAAGAAGCAGGCAAAACATCAAGAGGCAGCTGATGACCAACTTCATCCTGGGCTCTTTTGATGACTACTCCTCC
GACGAGGACTCTGTTGCTGGCTCATCTCGTGAGTCTACCCGGAAGGGCAGCCGGGCCAGCTTGGGGGCCCTGTCC
CTGGAGGCTTATCTGACCACAGGTGAAGCTGAGACCCGCTCCCCACTATGAGGCCGAGCATGTGCGGACTCCAC
CTGGTGAAGAGGGGACGGGAACACAAGAAGCTGGACCTGCACAGAGACTTTACCGTGGCTTCTCCCGCTGAGTTT
GTCACACGCTTTGGGGGGGATCGGGTCATCGAGAAGGTGCTTATTGCCAACAACGGGATTGCCGCCGTGAAGTGC
ATGCGCTCCATCCCGCAGGTGGGCTATGAGATGTTCCGCAACGAGCGGGCCATCCGGTTTGTGTGATGGTGACC
CCCGAGGACCTTAAGGCCAACGCAGAGTACATCAAGATGGCGGATCATTACGTCCCCGTCCCAGGAGGGCCCAAT
AACAACTATGCCAACGTGGAGCTGATTGTGGACATTGCCAAGAGAATCCCCGTGCAGGCGGTGTGGGCTGGC
TGGGGCCATGCTTCAGAAAACCTAAACTTCCGGAGCTGCTGTGCAAGAATGGAGTTGCTTTCTTAGXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXGAGATAAGATCGCCTCCACCGTTGTGCGCCAGACGCTACAGGTCCCAACC
CTGCCCTGGAGTGGAAGCGGCCGTGACAGTGGAGTGGACAGAAGATGATCTGCAGCAGGGAAAAAGAATCAGTGTG
CCAGAAGATGTTTATGACAAGGGTTGCGTGAAAGACGTAGATGAGGGCTTGGAGGCAGCAGAAAGAATTGGTTTT
CCATTGATGATCAAAGCTTCTGAAGGTGGCGGAGGGAAGGGAATCCGGAAGGCTGAGAGTGGCGAGGACTTCCCG
ATCCTTTTTCAGACAAGTACAGAGTGAGATCCCAGGCTCGCCCATCTTTCTCATGAAGCTGGCCCAGCACGCCCGT
CACCTGGAAGTTCAGATCCTCGCTGACCAGTATGGGAATGCTGTGTCTCTGTTTGGTTCGCGACTGCTCCATCCAG
CGGCGGCATCAGAAGATCGTTGAGGAAGCACCGGCCACCATCGCCCCGCTGGCCATATTTCAGTTTCATGGAGCAG
TGTGCCATCCGCCTGGCCAAGACCGTGGGCTATGTGAGTGCAGGGACAGTGAATACCTCTATAGTCAGGATGGC
AGCTTCCACTTCTTGGAGCTGAATCCTCGCTTGCAGGTGGAACATCCCTGCACAGAAATGATTGCTGATGTTAAT
CTGCCGGCCGCCAGCTACAGXXX
XX
XX
CGGAGCAGCAAGAACGTGTGGGGTTACTTCAGCGTGGCCGCTACTGGAGGCCTGCACGAGTTTGGCGATTCCCAA
TTTGGGCACTGCTTCTCCTGGGGAGAGAACCGGAAGAGGCCATTTCGAACATGGTGGTGGCTTTGAAGGAAGT
TCCATCCGAGGCGACTTTAGGACTACCGTGAATACCTCATTAACTCCTGGAGACCGAGAGCTTCCAGAACAAC
GACATCGACACCGGGTGGTTGGACTACCTCATTGCTGAGAAAGTGCAGGAGAAACCGGATATCATGCTTGGGGTG
GTATGCGGGGCCCTTGAACGTGGCCGATGCGATGTTTGAACGTGCATGACAGATTTCTTACACTCCCTGAAAGG
GGCCAGGTCTTCCAGCGGATTCACTACTGAACCTCGTAGATGTGGAATTAATTTACGGAGGTGTTAAGTACATT
CTCAAGGTGGCCCGGAGTCTCTGACCATGTTCTGTTCTCATCATGAATGGCTGCCACATCGAGATTGATGCCAC
CGGCTGAATGATGGGGGGCTCTGCTCTCTTACAATGGGAACAGCTACACCACCTACATGAAGGAAGAGGTTGAC
AGXXXXXXXXXXCGGCAATAAGACGTGTGTGTTTGAAGGAGAACGATCCTACAGTCTTGAGATCCCCCTCG
GCTGGGAAGCTGACACAGTACACAGTGGAGGATGGGGGCCACGTTGAGGCTGGGAGCAGCTACGCTGAGATGGAG
GTGATGAAGATGATCATGACCCTGAACGTTTCAAGAAAGAGGCGGGTGAAGTACATCAAGCGTCCAGGTGCCGTG
CTGGAAGCAGGCTGCGTGGTGGCCAGGCTGGAGCTCGATGACCTTCTAAAGTCCACCCGGCTGAACCGTTTACA
GGAGAACTCCCTGCCAGCAGACACTGCCATCTCGGAGAGAACTGCACCAGGTCTTCCACAGCGTCTTGAA
AACCTCACCACGTGATGAGTGGCTTTTGTCTGCCAGAGCCGTTTTCAGCATAAAGCTGAAGGAGTGGGTGTCAG
AAGCTCATGATGACCTCCGGCACCCGTCAGTCCGCTGCTGGAGCTGCAGGAGATCATGACCAGCGTGGCAGGC
CGCATCCCCGCCCTGTGGAGAACTGTGTCGCGAGGGTGATGGCCAGTATGCCAGCAACATCACCTCGGTGCTG
TGCCAGTTCCCCAGCCAGCAGATAGCCACCATCCTGGAGTGCATGCAGCCACCTGCAGCGGAAGGCTGATCGA
GAGGTCTTCTTTCATCAACACCCAGAGCATCGTGAGTTGGTCCAGAGGTACCGCAGCGGGATCCGCGGCTATATG
AAAACAGTGGTGTGGATCTCCTGAGAAGATACTTGGCTGTTGAGCACCATTTTCAGCAAGGCAAGAGATGCTGA
TGCCAACACCAAGTGGGATGGTGGGGGGCGTGAGGAGCCTGAGCTTTACCTCTGTGTGGTGTGTTTGTCTCCCCAG
CCCACTACGACAAGTGTGTGATAAACCTCAGGGAGCAGTTCAAGCCAGACATGTCCAGGTGCTGGACTGCATCT

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FIGURE 3787B

TCTCCACGCACAGGTGGCCAAGAAGAACAGCTGGTGATCATGTTGATCGATGAGCTGTGTGGCCAGACCCCTT
CCCTGTCGGACGAGCTGATCTCCATCCTCAACGAGCTCACTCAGCTGAGCAAAAGCGAGCACTGCAAAGTGGCCC
TCAGAGCCCGGCAGATCCTGATTGCCTCCCACCTCCCCCTCTACGAGCTGCGGCATAACCAGGTGGAGTCCATTT
TCCTGTCTGCCATTGACATGTACGGCCACCAGTTCTGCCCCGAGAACCTCAAGGTGAAGAAATTAATACTTTTCGG
AAACAACCATCTTCGACGTCTGCTGCTTCTTCTATACGCAAAACAAAGTCGTGTGCATGGCGTCTTTGGAGG
TTTACGTGCGGAGGGGCTACATCGCCTATGAGTTAAACAGCCTGCAGCACCGGCAGCTCCCGACGGCACCTGCG
TGGTAGAATTCCAGTTCATGCTGCCGTCTCCACCCAAACCGGATGACCGTGCCCATCAGCATACCAACCCCTG
ACCTGCTGAGGCACAGCACAGAGCTCTTCATGGACAGCGGCTTCTCCCCACTGTGCCAGCGCATGGGAGCCATGG
TAGCCTTCAGGAGATTTCAGGACTTCACCAGAAATTTTGATGAAGTCATCTCTTGCTTCGCCAACGTGCCCAAAG
ACACCCCCCTCTTCAGCGAGGCCCCGACCTCCCTATACTCCGAGGATGACTGCAAGAGCCTCAGAGAAGAGCCCCA
TCCACATTCTGAATGTGTCCATCCAGTGTGCAGACCACCTGGAGGATGAGGCACTGGTGCCGATTTTACGGACAT
TCGTACAGTCCAAGAAAAATATCCTTGTGGATTATGGACTCCGACGAATCACATTCTTGATTGCCAAAGAGAAAG
AATTTCCCAAGTTTTTTCACATTCAGAGCAAGAGATGAGTTTGAGAAGATCGCATTTACCGTCACCTTGGAACTG
CCCTGGCCTTCCAGCTGGAACTTAACCGGATGCGTAACTTCGATCTGACCGCCGTGCCCTGTGCCAACCACAAGA
TGCACCTTTACCTGGGTGCTGCCAAGGTGAAGGAAGGTGTGGAAGTGACGGACCATAGGTTCTTCATCCGCGCCA
TCATCAGGCACTCTGACCTGATCACAAGGAAGCCTCCTTCGAATACCTGCAGAACGAGGGTGAGCGGCTGCTCC
TGGAGGCCATGGACGAGCTGGAGGTGGCGTTCAATAACACCAGCGTGCGCACCGACTGCAACCACATCTTCTCA
ACTTCGTGCCCACTGTCTATGACCCCTTCAAGATCGAGGAGTCCGTGCGCTACATGGTTATGCGCTACGGCA
GCCGGCTGTGGAAGTCCGTGTGCTACAGGCTGAGGTCAAGATCAACATCCGCCAGACCACCACCGGCAGTGCCG
TTCCCATCCGCTGTTCATCACCAATGAGTCGGGCTACTACCTGGACATCAGCCTCTACAAAGAAGTGACTGACT
CCAGATCTGGAATATCATGTTTCACTCCTTCGGCAACAAGCAAGGGCCCCAGCACGGGATGCTGATCAATACTC
CCTACGTACCAAGGATCTGCTCCAGGCCAAGCGATTCCAGGCCCAGACCCTGGGAACCACCTACATCTATGACT
TCCCGGAAATGTTTCAGGCAGGCTCTCTTAACTGTGGGGCTCCCCAGACAAGTATCCCAAAGACATCCTGACAT
ACACTGAATTAGTGTGGACTCTCAGGGCCAGCTGGTGGAGATGAACCGACTTCCTGGTGGAAATGAGGTGGGCA
TGGTGGCCTTCAAATGAGGTTTAAGACCCAGGAGTACCCGGAAGGACGGGATGTGATCGTCATCGGCAATGACA
TCACCTTTCGATTGGATCCTTTGGCCCTGGAGAGGACCTTCTGTACCTGCGGGCATCCGAGATGGCCCGGGCAG
AGGGCATTCCCAAATTTACGTGGCAGCCAACAGTGGCGCCCGTATTGGCATGGCAGAGGAGATCAAACACATGT
TCCACGTGGCTTGGGTGGACCCAGAAGACCCCCACAAGGATTTAAATACCTGTACCTGACTCCCCAAGACTACA
CCAGAATCAGCTCCCTGAACCTCCGTCCACTGTAAACACATCGAGGAAGGAGGAGATCCAGATACATGATCACGG
ATATCATCGGGAAGGATGATGGCTTGGGCGTGGAGAATCTGAGGGGCTCAGGCATGATTGCTGGGGAGTCCCTCTC
TGGCTTACGAAGAGATCGTCACCATTAGCTTGGTGACCTGCCGAGCCATTGGGATTGGGGGCTACTTGGTGAGGC
TGGGCCAGCGAGTGATCCAGGTGGAGAATTCACATCATCCTCACAGGAGCAAGTGCTCTCAACAAGGTCTTG
GAAGAGAGGTCTACACATCCAACAACCAGCTGGGTGGCGTTTTCAGATCATGCATTACAATGGTGTCTCCACATCA
CCGTGCCAGATGACTTTGAGGGGGTTTATACCATCCTGGAGTGGCTGTCTATATGCCAAAGGATAATCACAGCC
CTGTCCCTATCATCACACCCACTGACCCATTGACAGAGAAATTGAATTCCCTCCCATCCAGAGCTCCCTACGACC
CCCGGTGGATGCTTGCAGGAAGGCCTCACCCAACCTCTGAAGGGAACGTGGCAGAGCGGATTCTTTGACCACGGCA
GTTTCAAGGAAATCATGGCACCCCTGGGCGCAGACCGTGGTGACAGGACGAGCAAGGCTTGGGGGGATTCCCGTGG
GAGTGATTGCTGTGGAGACACGGACTGTGGAGGTGGCAGTCCCTGCAGACCCTGCCAACCTGGATTCTGAGGCCA
AGATAATTACGAGGCAGGACAGGTGTGGTTCCAGACTCAGCCTACAAAACCGCCAGGCCGTCAAGGACTTCA
ACCGGGAGAAGTTGCCCCGTGATGATCTTTGCCAACTGGAGGGGGTTCTCCGTGGCATGAAAGACATGTATGACC
AGGTGCTGAAGTTTGGAGCCTACATCGTGGACGGCCTTAGACAATACAAACAGCCCATCCTGATCTATATCCCGC
CCTATGCGGAGCTCCGGGGAGGCTCCTGGGTGGTCATAGATGCCACCATCAACCCGCTGTGCATAGAAATGTATG
CAGACAAAGAGAGCAGGGGTGGTGTCTGGAACCAGAGGGGACAGTGGAGATTAGTTCCGAAAGAAAGATCTGA
TAAAGTCCATGAGAAGGATCGATCCAGCTTACAAGAAGCTCATGGAACAGCTAGGGGAACCTGATCTCTCCGACA
AGGACCGAAAGGACCTGGAGGGCCGGCTAAAGGCTCGCGAGGACCTGCTGCTCCCCATCTACCACCAGGTGGCGG
TGCAGTTCGCCGACTTCCATGACACACCCGGCCGGATGCTGGAGAAGGGCGTCATATCTGACATCCTGGAGTGG
AGACCGCACGCACCTTCTGTATTGGCGTCTGCGCCGCTCCTCTGGAGGACCAGGTCAAGCAGGAGATCCTGC
AGGCCAGCGGGGAGCTGAGTCACGTGCATATCCAGTCCATGCTGCGTCGCTGGTTCGTGGAGACGGAGGGGGCTG

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FIGURE 3787C

TCAAGGCCTACTTGTGGGACAACAACCAGGTGGTTGTGCAGTGGCTGGAACAGCACTGGCAGGCAGGGGATGGCC
CGCGCTCCACCATCCGTGAGAACATCACGTACCTGAAGCACGACTCTGTCCTCAAGACCATCCGAGGCCTGGTTG
AAGAAAACCCCGAGGTGGCCGTGGACTGTGTGATATACCTGAGCCAGCACATCAGCCCAGCTGAGCGGGCGCAGG
TCGTTACCTGCTGTCTACCATGGACAGCCCGGCCTCCACCTGA

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FIGURE 3788A

GGCGGTAGTGCGTCGGCTGCTGCCCCGGGTCTGGCAGAACTCGGGTGTTTTGGGCTGAGACAGTGGCAGCTGCGG
CCCCGACCCCAAGTGCGGGGACCTCCGGCGAATAAAGGTTCGGCCTGCGGGTAGGCCGGTAGGGCCTGCGGTCCGG
CCTGCGGGAGAACTGGGTCGTCACTCCTCCGAGTGGTGGGGCTGGGGACTTTGAGGGAGTTGGCTCTAGGGCACA
GTCCCTGCCTGGCCAGGTTCGGAGGAACAAGTGCTGGGATCTGGCGTGTGTGCTCCAGGGGCTCTTTCCGCGGGCC
TTTCCACCTCTTTTCACTTTGGGGACGGTAGGCCTTTATAAACGGACTAATGCTGGGTGATTTGTTTCTGTGGTT
GTTGATGCCGAGGAAAGACTCTGGGCCCCAGGACTCACCTAACTGGAGTTCGAATACTGTTTCGCTCGCTGTGTG
ACCTTGGAATAACAAGCTTTTCTGAAGTGAGAAGCTGTTCTCAGCCACGAGTCTGTGCAAGATCACTAAT
GATTACCTGGCATTCTGCGACACAGGCGAGTCTCAGGGTTTGTGCAAGTTTGCAAACATGTTACCCCTGTCTC
AGACCTCGAGAGCATGGTTCATCGATAGAGCCCGTCAGGCACGAGAAGAAAGGCTTGTGCAAGGAACGGGAGC
GGGACAGCTGTTGTGATCCAGGCCATGTCCGGAGTTTTCTGTGCGAGTGCAGTGCAGAGAGATATCAGGAGAG
AGATTGATGACTTTTTAAAGCAGATGACCTGAGTCCACTAAAGAAGTGCATTTGTATTTTCAAGATTGCCA
GAAACTGCTGTTCTATTCAGAATCAAAGAGGATAATGAGAGATTTGAGAAGTTGTGTGCGCAGCATCTGAGCA
GCATGGATGCTGAGAATGAGCCTAAGGTGTGGTATGTGTCCCTGGCTTGTCTAAGGACCTCACCTCCTTTGGA
TTCAACAGATCAAGAACATTTTGTGGTACTGCTGTGATTTTCTCAAGCAGCTCAAGCCTGAAATCCTGCAGGACT
CCCGACTCATCACCTGTACCTCACGATGCTTGTACCTTCACAGACACTTCAACGTGGAAAATCTTCGGGGAA
AAGGTGAAAGTCTTCGACCAGCGATGAACCACATTTGTGCAATATAATGGGACATCTCAACCAGCATGGATTTT
ATTCTGTGCTGCAGATATTGTTAACCCGTGGCCTGGCAAGACCCCGTCTTGTCTATCCAAAGGCACTTTAACAG
CAGCTTTTCTCTAGCGTTACGCCCTGTGATTGCTGCACAGTCTCAGACAATCTGATTGCGCCGTTCTCTATCC
ACATCATGCTGTGCTGCTGCTGCTGGTGACTCATCTCAGCACAGTGACCCCTGAGCGCTCACTGTTTTAGAATCCC
ATGATGCTTCGTAATTCATCATATTTTAAAGAGCAACCTCTACACTGGGCTCCCTCAGCCCCAGAGTGTAGAGGAGGA
GATGCCATACGCTTTGTCTAATGGGCAACCTCTACACTGGGCTCCCTCAGCCCCAGAGTGTAGAGGAGGAGA
CAGATGGGTTCTGTGAGTTTGTCTACCCAGACGCTGTGCTACTGTGCGAAGTATGTGTCTCAGAAGAAGTCCAACC
TGACCCACTGGCATCCTGTCTTGGCTGGTTCTCCCAATCTGTGGATTATGGCCTTAACGAGTCAATGCACTTGA
TCACCAAACAGCTGCAGTTCTTGTGGGGGGTGCCTCTGATCCGGATCTTCTTCTGTGACATCCTGAGCAAGAAGC
TACTGGAGAGCCAGGAGCCAGCCACGCACAGCCAGCATCCCTCAGAATGTGCTCCAGTGAAGAGTCTCCTAA
AGCGTGCTTTTCAAAGTTCGGCATCAGTCCGGAATATTCTCAGGCCTGTGCGGGGTAAACGGGTGCACTCTGCAG
AAGTCCAGAAGGTTTGCAACATCTGTGTCTCTACCAGACCTCGCTGACAACCTCTCACACAGATTTCGGCTGCAGA
TACTCACAGGTCTCACTTACCTTGATGACCTGCTTCCCAAAGTGTGGGCATTTATCTGTGAGCTCGGGCCCCACG
GAGGGTTAAAGCTCTTCTTGGAATGCCTGAACAATGACACTGAAGAGTCCAAGCAACTCTTGGCCATGCTGATGC
TGTTCTGTGACTGTTTCGCGGCACCTCATCACAATCCTTGATGACATTGAAGTTTATGAAGAACAGATTTCAATCA
AACTGGAAGAGCTGGTCACTATCTCCTCTTCTGAAATCTTTTGTGTTAAGATGATCTGGGATGGAATTGTAG
AGAACGCCAAGGGTGAGACCTTGAGCTGTTCCAGTCTGTCCACGGGTGGCTTATGGTGTGTACGAGCGGGACT
GCCGGCGGCGCTTACCCCCGAGGACCACTGGCTGCGAAAGGATCTCAAACCTAGCGTGCTCTTCCAAGAATCG
ACAGGGACAGAAAACGGGCACAGTTGATCCTGCAGTACATCCACATGTCTATCCCTCACAAAAACAGAGTTCTAC
TGTTTCGAACCATGGTTACCAAGGAGAAGGAGAACTGGGGCTGGTGGAACCAGCTCTGCCCTCCCCGCATGTCA
CTCACATACCATCCGCCGGTCCAGGATGCTGGAGAGCTTGTTTGAGTGCCCTGGCCACTGGTGATCAATGCCG
AGAGCTGCTAGGAAGGCAGTGTGTGCTGAACAGTGGATGTTTCTGACATTCTTCAAGGACGGCTACGAGCAGCTT
AGGCAGCTCTCCAGCACGCCATGAAGGGGTGATCCGTGTGAAGTTTGTCAATGACCTCGGGGTGGACGAAGCA
GGGATTGATCAAGACGGTGTGTTTAAAGGAGTTCTTGGAAGAGATCATCAAGAGAGTTTTTGACCCAGCACTCAAT
CTGTTCAAGACAACAGTGGGGATGAGAGGCTGTACCCCTCACCCACATCCTACATCCATGAGAATTACCTGCAG
CTCTTCGAGTTTGTGGGGAAGATGCTGGGGAAGGCTGTGTATGAGGGAATTGTGGTGGACGTGCCATTTGCATCC
TTCTTCTGAGCCAACCTGCTTGGGCACCACCACAGCGTCTTCTATAGCTCGGTGGATGAACTGCCTTCTCTGGAC
TCCGAGTTCTATAAAAACCTCACCTCCATCAAGCGTATGATGGGGACATCACTGACCTGGGCCTGACGCTGTCT
TACGACGAGGACGTGATGGGTGAGCTGTTTGCCATGAACTGATTCTTGAGGGAAGACCATTCCTGTTACAAAT
GAAAATAAGCAACAGAATTAGCTACATCCATCTGATGGCAGATTTTGAATGCACACTCAAATAAAAAACCAAC
AGCTGCCCTCATTAGCGGATTCGGTTCATTATCAAACCCGAGTGATCCGAATGTTCTCAACTCCTGAAGTGA
GCGTCTCATCTCTGGCGACAATGCTGAGATTGATCTGGAAGATTTAAAGAAGCACACAGTCTACTACGGTGGTTT
CCATGGAAGTCACAGAGTCATCATCTGGCTCTGGGATATTCTGGCCTCCGACTTCACACCGGATGAGAGAGCTAT

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FIGURE 3788B

GTTTCTGAAGTTTCGTGACCAGCTGCTCCAGACCCCGCTCCTGGGATTGCGCTACCTCAAGCCTCCATTCTCCAT
CCGCTGCGTGGAGGTGTCGGACGATCAGGACACCGGGGACACTCTGGGCAGCGTCCTCCGGGGCTTCTTCACCAT
CCGCAAGCGGGAGCCAG

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FIGURE 3789

MFTLSQTSRAWFIDRARQAREERLVQKERERA AVVIQAHVRSFLCRSRLQDIRREIDDFKADDPESTKRSALC
IFKIARKLLFLFRIKEDNERFEKLCRSILSSMDAENEPKVWYVSLACSKDLTLLWIIQQIKNILWYCCDFLKQLKP
EILQDSRLITLYLTMLVTFTDTSTWKILRGKGESLRPAMNHICANIMGHLNQHGFSVLQILLTRGLARPRCLS
KGTLTAAFSALALRPVIAAQFSDNLIRPFLIHIMSVPALVTHLSTVTPERLTVLESHDMLRKFIFLQDQDRCDV
CESLEGCHTLCLMGNLLHLGSLSPRVLEEETDGFVSLLTQTL CYCRKYVSQKSNLTHWHPVLGWFSSQVDYGLN
ESMHLITKQLQFLWGVPLIRIFFCDILSKKLLSEQEPAAQASPQNVLPVKSLLKRAFQKSASVRNLRPVGGK
RVDSAQVQKVCNICVLYQTSLTTLTQIRLQILTGLTYLDDLLPKLWAFICELGPHGGLKLFLECLNNDTEESKQL
LAMLMLFCDCSRHLITILDDIEVYEEQISFKLEELVTISSFLNSFVFKMIWDGIVENAKGETLELFQSVHGWL MV
LYERDCRRRFTPEDHWRKDLKPSVLFQELDRDRKRAQLILQYIPHVIPHKNRVLLFRMTMTKEKEKGLVETSS
ASPHVTHITIRRSRMLEDGYEQLRQLSQHAMKGVIRVKFVNDLGVDEAGIDQDGVFKEFLEEIIKRVFDPALNLF
KTTSGDERLYPSPTSIIHENYLQLFEFVGKMLGKAVYEGIVVDVPFASFFLSOLLGHHHSVFYSSVDELPSLDSE
FYKNLTSIKRYDGDITDLGLTSLSYDEDVMGQLVCHELIPGGKTIPVTNENKISYIHLMAHFRMHTQIKNQTAALI
SGFRSIIKPEWIRMFSTPELQRLISGDNAEIDLEDLKKHTVYYGGFHGSHRVI IWLWDILASDFTPDERAMFLKF
VTSCSRPPLLGFAYLKPPFSIRCVEVSDDQDTGDTLGSVLRGFFTIRKREPGGRLPSTSTCFNLLKLPNYSKKS
V
LREKLRYAISMNTGFELS

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FIGURE 3790A

GAAGCGCCGCCGCCACCGCCGCCTTTGCTGTCCCCCGGCCTCTAGTTCCCCGCAGGTGGGAGGTGGGAGCCATGT
CGAAACGGCTCCGGAGCAGCGAGGTGTGCGTGACTGCAGCGGGCGGGATCCTTCCTGGGCATCAGTAAATAGGG
GAACGTTTTTATGTGATGAGTGTGTCAGTGTCCATCGGAGTCTAGGGCGCCATATCTCCCAAGTGAGGCATCTGA
AACACACACCGTGGCCTCCAACACTGCTTCAGATGGTTGAGACCTTGTATAATAACGGTGCTAACTCTATATGGG
AGCATTCTTTGCTGGACCCTGCGTCTATTATGAGTGGAAAGACGTAAAGCTAATCCACAGGATAAAGTACATCCCA
ATAAAGCGGAATTCATCAGAGCCAAGTATCAGATGTTAGCGTTCGTCCATCGCTTGCCCTGCCGGGATGACGATA
GTGTGACTGCCAAAGATCTTAGCAAGCAACTCCATTTCGAGCGTGAGAACAGGGAATCTTGAAACCTGTTTGAGAC
TGTTATCTTTAGGAGCACAAGCCAACCTTCTTTCATCCTGAAAAAGGAAACACCCCACTCCATGTTGCCTCCAAAG
CAGGGCAGATTTTACAGGCTGAATTATTGGCAGTATATGGAGCAGACCCAGGCACACAGGATTCTAGTGGGAAAA
CTCCCGTTGATTATGCAAGGCAAGGAGGGCACCATGAGCTGGCAGAGCGCCTCGTGGAATACAGTATGAGCTAA
CGGACAGACTAGCCTTCTATCTCTGTGGCAGGAAACCAGATCACAAAAATGGACAGCACTTTATAATACCTCAAA
TGGCAGACAGCAGCCTGGATTGTCTGAATTGGCAAAAGCTGCTAAGAAGAAACTTCAATCTCTAAGTAATCATT
TGTTTGAAGAACTTGCCATGGATGTGTACGATGAAGTTGACAGGCGAGAGACGGATGCAGTCTGGCTTGCCACGC
AAAACCACAGCGCCCTGGTAACCGAGACAACGGTCGTCCCTTCTTCCGGTCAATCCTGAGTACTCATCAACAC
GAAATCAGGGCAGACAGAAGTTAGCTCGGTTCAACGCCCATGAGTTTGCCACGCTGGTCATTGACATTCTCAGTG
ACGCCAAGAGGAGACAGCAGGGCAGTTCTCTCTCGGGTTCAAAAGACAATGTGGAGCTCATACTGAAAACCATCA
ATAACCAGCACAGCGTTGAGAGTCAAGACAACGATCAGCCGACTATGACAGCGTGGCATCAGACGAAGACACAG
ATTTGGAACCACTGCAAGCAAAACAAACCGGCAGAGAGCCTAGATTAGATTATCAGATGGACCAGTCACTG
TACAGGAATTTATGGAGGTCAAAAACGCTCTAGTGGCTTCTGAGGCCAAGATACAGCAGCTAATGAAGGTGAATA
ACAACCTGAGTGACGAGCTGAGAATTATGCAGAAAAAGCTTCAAACTCCAGAGTGAATTCGAACCTCAGGA
AACAGGCCACAACCAATGTATATCAGGTGCAAACTGGTTCTGAGTACACAGACACTTCCAACCACTCTTCCTTAA
AGAGACGTCCGTCTGCCCGGGGCAGTAGGCCATGTCCATGTACGAGACCGGATCAGGTCAGAAACCATATCTCC
CAATGGGAGAAGCGAGCCGCCCGAAGAGAGCAGGATGAGACTCCAGCCCTTCCCCGCGCACATCGGGAGGAGTG
CACTTGTGACCTCCTCTTCATCTCTGCCTTCCTTCCCTCCACACTTTCCTGGTCGAGGGACGAAAGCGCCGAA
GGGCATCCAGGCTGGAGAAGCAGAACAGCACACCTGAGAGTGACTACGACAACACTCCCAACGACATGGAGCCAG
ATGGCATGGGGTCAAGCCGAAAGGGACGGCAAGAAGTATGGTGTGGCCAGGGGATGGCTGGTACCAGACACAG
CAGAACCCCATGTGGCCCCAAGCCCCACTCTCCCTAGCACCGAAGATGTCTATCAGGAAGACTGAACAGATCACC
AAAACATACAGGAGCTCTTAAGAGCAGCCCAAGAAAAATAACATGACAGTTATATTCCTGCTCAGAGAGGATAC
ACGTAGCTGTTACAGAAATGGCAGCATTATTCCTCAAAAACCCAAAGTCTGATATGGTGAGGACTTCCCTTCGTT
TACTGACGTCCAGTGCTTACCGACTGCAGTGCAGTGCAGTGAAGAAGACCCCTCCAGGGGACCCCGGCTCACCCACAG
ACGTTTCAGCTGGTCACGCAGCAGGTCACTCAGATGTGCGTACGACATCGCCAAGGCTGCCAAGCAGCTGGTTACCA
TCACCACCAAGAGAACAACAACCTGCAAGGGCAGGGCACCGCCTCCTCTGTTTTCTAGGCTTTTATAAAGTCCAA
TTTCAAATTCAGACGCAGAACTCTTCAGATTTCTACAAAAAGAAACATTTAATGACGGTTTTAAACTTTTTAAAA
GAAAACTCAGTATTATTTTGTCATGTTTTCTAACCAATTTTCAACTATTTAACCACCTTGCCCTATTTTGTGCCT
ATTTGCTGTTTTAGTTTCTGATGTTTGGTTGTGTGTCACAACTGTTGAGTTGATCACATACATCCAAAAGTAT
AGTTTCATTGTCTAAAGTTTGTGAAAACTTTTCCATCCCTTAAAACTCCCTGCCTATGGCTGAAACTATAAATGA
AATTTTTCATAAAACATTTTCTTGAGAGAGTTTCAAGTTAAAAAAGAAAAAATCAGCGTCATTTGTTCCCTGCCAAG
CATCGTGCAATAAGTGAATTTCTTGGCCTACTTCATAATCTCTAAGTTTGGGGTATCTCCAAGCATGTATGTAGA
GAAAGGACTTTGCCGCTTTTTTAAAACTAGTGTACAGTCTCTCTTGGGAGGAAACAATGAATTGGTTCAATTTCTT
CTCAGTGTTTTACCCTGTTACATGTTCTGTTATTTAATGTTGTTATCTCAAGCTCCTATCTCTTGATGTTTTCTT
GTCATCTTGAAGGCTCCATGGAATGAGATAAAGCATTGACCCACCACAGGACATCTCATGAAGCCATGTTACAGG
TAGGAGCTCCACGCACATCACCACCCATTGTGAGGTGCTCTCCCTCACCCCTGTAAGCCAGACAGTTTGTTCAAA
ACCTGCAGCAAAAGAGAAGCATCAGTCTAACAAGCCAGAACCTCATTTTGTGCCACCCATTTAGGTATCACTACCAT
GAACTATAGGGAAAAAGAAATCACCTACTCCCTGACACTGTGTTGTACCCTTCATCCAAAAGTCAGCTTGCTTCTC
TGACCACTTACAGCTTTCTCATATGAGTTGCTTACATTTTTTCATCATCTTTAAGGACTTCTTATAAGGAAAGAT
GTATCGTATCGCAGTCATCTGAGTTAGTTTCTCCTCCATCACCTCATGAGTACTTAAAAATTAGACATCACTTT
CAAGAGTTCTTATAGAGTGTGCTCTAGCTGGCTGCCTGCTACCCCAAGCTCTGAAAGAGTAAGGTTGAAGTGC
TGGAACATGCTCAGATTGTTTTTTAGTTACTCAAAGCCCTTCTTGTCTGAATGTGAAAGCTCTTCCCGTTCC

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FIGURE 3790B

TGCTTACTGCAGCCATTCTGTGTGTGTGGTTCAGACCCTGGCCTAGGGCCGGTGATGTGGATGAGTGAAGGGAGC
CAGGTACACGGCAGCAGGGCAGAGGAGACTATGGGGAGCCCACCGCTACACAGTAGGGGCAGTAGCCCCAGCT
CCACGCCTGTTGCCATGTGGAAAAGTGGGCCTAGGGTGGCCACAGCTTTGATTTTCAAGAGACAAGAAACCTAG
ATGTTTTTTGGTGCCATCTCTCCATTTATAAATGTTGGCAACCAATTTGAACACTTTCAGAGACCATGTGCAGGT
GAGCTGTGTCTCTAGGCTGCCAGCTCACAGCCCCACCCAGGGCCCTGTAAGCTGTGCAGTGTGAGGGCCTGG
CTTCCCCGGACACACCTGGAGCAGCCTCTGAGTCTTACCCGTAATGGAGCCGGCCAACCTGTGTGTTATGTTGC
TGTCGCTCCTGTTTTTAACCATATGTTCTGTCCCATAGCAGTCATTACACATGTGAAGAAGACACAAGAATCAA
AGTACAAGTTGCCTCAATACATGCTAATAACTAAGCTTCTATTTTCACAGGACTGATCGATGCACACCTTTATAG
CTTGACCATATGCTGTGATGAAAGTAGCACCCGACGGTGCTTGCTTTACTAAGTCACCGTGTGTGGATGCTTTT
GTCGCATTTTGCTTCACTGTGAGTAGCATGGGAAAAGGGTCCACGTCTCCAAAAGACTCTCCACTTGTTTGCC
CACAGCCCTAAGTGCCACATTGCTGTTGGATGCTCCCGGGATGCCTTCTAGAAGGGGGCCTCCACCTTAAGTTC
AGGCGCCATCTGATAGCCTTTTCTGCAGGCTTCATGTCCTTAGCTGACCCTCCTTTATCTTGCAAACCCCTGCCC
CTGCTGTCCCAGGGAGGACGGGCTTCTGTAGAGGCTTCTGGGAAATGAGCTGTCTGCAGGAGGTGAAGCAGTGT
TTCCTTGGAATGTTTGAGGACCTGCAATAGAAGATGTTGCCTTTATGGCCCTAGAGAAAGTCAAGGAACATGGGG
ACCAACAAGCATTTCAGTTGTAAGAATATGTCAGAAGAGTGCTCGGTTAGCCACGGTGCCAAAACCTCCAAAC
AAGTTCCCCGGTGGAATGACGTGGCCATTGGAGGGCTGCAGGTCTGCTCTCTGTATGTGCCCCGCGCATTTCTCT
TGGCCTCATCTGAGATCTGGTGTGAGAGTTCTCTGCTCCTGTTGGCAAATCGCACCTTATCTGAACATTTGTTCC
AGCCACCTTTTGCACATGGATTCCGTACCTTGCACTAGCAATGTCTACCTTCAGTAACGTCGTTCTTTTTACCC
TGTATTCTCAATGATCCCTTCCTCCCCATATGCCACCTTCCCCCAAAGCTGATAGGGCAGAGGTGCACCTTTATG
AACTGGCAGTTGACTGAACAGAAGGAAACAGCTGTACCTCTAAGCTCCTTTCACAGAAATCGTCATCTGCCTTG
GAATGCAAATAGTTCTTATTTGCAAAGAACAGTGAATTGGGCCCAAAGATCAAACACAGCATTTCATGTAATCA
GAATTCTAAACGCACAACCTCGGGAGCTGTGCACGGCTTCTCAAGTGATTGAGTTGCAGAACCAAGAGCAAAACTC
GCCTGTTTTTGTCTCAATGGCACCCATGAGCTTTCCAATAGTATAGTTTCTTTCTTTCTTGTCTGGTTGAA
GGTAACGTGTTCTAGAAAAGAAAATGCTGCATAGGAAAAGTGAAGTGCCTTTTATTCCAACGTGTTTGATCCCT
GTCATCATTATTCTGTACTTTTTATTGTACATTCTATTCTGTAATTATTGTGCCCTTTAAGTGTGTGAAAATC
GTTTTGGAATTGTGCCTGCTAGTTATGCAATAAACAGGCTCTACAAGTG

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FIGURE 3791

MSKRLRSSEVCADCSGPDPSWASVNRGTFLCDECCSVHRSLSGRHISQVRHLKHTPWPTLLQMVELYNNGANSI
WEHSLLDPASIMSGRRKANPQDKVHPNKAEFIRAKYQMLAFVHRLPCRDDDSVTAKDLSKQLHSSVRTGNLETCL
RLLSLGAQANFFHPEKGNTPLHVASKAGQILQAELLAVYGADPGTQDSSGKTPVDYARQGGHHELAERLVEIQYE
LTDRALAFYLCGRKPDHKNQHFIIIPQADSSLDLSELAKAAKKLQSLSNHLFEELAMDVYDEVDRRETDAVWLA
TQNHSAVLTETTVPFLPVNPEYSSTRNQGRQKLARFNAHEFATLVIDILSDAKRRQQGSSLGSKDNVELILKT
INNQHSVESQDNDQPDYDSVASDEDTDLETTASKTNRQKSLSDSDGPGVTVQEFMEVKNALVASEAKIQQLMKV
NNNLSDELIMQKKLQTLQSENSNLKQATTNVYQVQTGSEYTDTSNHSSLKRRPSARGSRPMSMYETGSGQKPY
LPMGEASRPEESRMRLQPPFAHIGRSALVTSSSSLPSPSTLSWSRDESARRASRLEKQNSTPESDYDNTPNME
PDGMGSSRKGRQSRMVWPGDGLVPDTAEPHVAPSTLPSTEDVIRKTEQITKNIQELLRAAQENKHDSYIPCSE
IHVAVTEMAALFPKKPKSDMVRTSLRLLTSSAYRLQSECKKTLPGDPGSPTDVQLVTQQVIQAYDIAKAAKQLV
TITTKENNN

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FIGURE 3792A

GAAGCGCCGCCGCCACCGCCGCCCTTTGCTGTCCCCCGGCCTCTAGTTCCCCGCAGGTGGGAGGTGGGAGCCATGT
CGAAACGGCTCCGGAGCAGCGAGGTGTGCGCTGACTGCAGCGGGCCGGATCCTTCCTGGGCATCAGTAAATAGGG
GAACGTTTTTATGTGATGAGTGTGTCAGTGTCCATCGGAGTCTAGGGCGCCATATCTCCCAAGTGAGGCATCTGA
AACACACACCGTGGCCTCCAACACTGCTTCAGATGGTTGAGACCTTGATAATAACGGTGCTAACTCTATATGGG
AGCATTCTTTGCTGGACCCTGCGTCTATTATGAGTGGAAAGACGTAAAGCTAATCCACAGGATAAAGTACATCCCA
ATAAAGCGGAATTCATCAGAGCCAAGTATCAGATGTTAGCGTTCGTCCATCGCTTGCCCTGCCGGGATGACGATA
GTGTGACTGCCAAAGATCTTAGCAAGCAACTCCATTGAGCGTGAGAACAGGGAATCTTGAAACCTGTTTGAGAC
TGTTATCTTTAGGAGCACAAGCCAACCTTCTTTCATCCTGAAAAAGGAAACACCCCACTCCATGTTGCCCTCCAAAG
CAGGGCAGATTTTACAGGCTGAATTATTGGCAGTATATGGAGCAGACCCAGGCACACAGGATTCTAGTGGGAAAA
CTCCCGTTGATTATGCAAGGCAAGGAGGGCACCATGAGCTGGCAGAGCGCCTCGTGGAATACAGTATGAGCTAA
CGGACAGACTAGCCTTCTATCTCTGTGGCAGGAAACCAGATCACAAAAATGGACAGCACTTTATAATACCTCAA
TGGCAGACAGCAGCCTGGATTTGTCTGAATTGGCAAAAGCTGCTAAGAAGAACTTCAATCTCTAAGTAATCATT
TGTTTGAAGAACTTGCCATGGATGTGTACGATGAAGTTGACAGGCGAGAGACGGATGCAGTCTGGCTTGCCACGC
AAAACCACAGCGCCCTGGTAACCGAGACAACGGTGCCTCCCTTTCTTCCGGTCAATCCTGAGTACTCATCAACAC
GAAATCAGGGCAGACAGAAGTTAGCTCGGTTCAACGCCCATGAGTTTGCCACGCTGGTCATTGACATTCTCAGTG
ACGCCAAGAGGAGACAGCAGGGCAGTTCTCTCTCGGGTTCAAAAGACAATGTGGAGCTCATACTGAAAACCATCA
ATAACCAGCACAGCGTTGAGAGTCAAGACAACGATCAGCCCGACTATGACAGCGTGGCATCAGACGAAGACACAG
ATTTGGAACCACCTGCAAGCAAAACAAACCGGCAGAAGCTTCAAACTCCAGAGTGAAAATTCGAACCTCAGGA
AACAGGCCACAACCAATGTATATCAGGTGCAAACTGGTTCTGAGTACACAGACACTTCCAACCACTCTCTCTAA
AGAGACGTCCGTCTGCCCCGGGCGAGTAGGCCCATGTCCATGTACGAGACCGGATCAGGTGAGAACCATATCTCC
CAATGGGAGAAGCGAGCCGCCCGGAAGAGAGCAGGATGAGACTCCAGCCCTTCCCCGCGCAGCATCCAGGCTGG
AGAAGCAGAACAGCACACCTGAGAGTGACTACGACAACACTCCCAACGACATGGAGCCAGATGGCATGGGGTCAA
GCCGAAAGGGACGGCAAAGAAGTATGGTGTGGCCAGGGGATGGCTGGTACCAGACACAGCAGAACCCCATGTGG
CCCCAAGCCCCACTCTCCCTAGCACCGAAGATGTATCAGGAAGACTGAACAGATCACCAAAACATACAGGAGC
TCTTAAGAGCAGCCCCAAGAAAAATAACATGACAGTTATATTCCCTGCTCAGAGAGGATACACGTAGCTGTTACAG
AAATGGCAGCATTATTCCCCAAAAAACCAAGTCTGATATGGTGAGGACTTCCCTTCGTTTACTGACGTCCAGTG
CCTACCGACTGCAGTCAGAGTGCAAGAAGACCCCTCCAGGGGACCCCGGCTCACCCACAGACGTTTCAGCTGGTCA
CGCAGCAGGTATCCAGTGTGCGTACGACATCGCCAAGGCTGCCAAGCAGCTGGTTACCATCACCAACAAAGAGA
ACAACAACTGCAAGGGCAGGGCACCGCCTCCTCTGTTTTCTAGGCTTTATAAAGTCCAATTTCAAATTCAGACG
CAGAACTCTTCAGATTTCTACAAAAAGAAACATTTAATGACGGTTTAAAACCTTTTTAAAAGAAAACCTCAGTATTA
TTTTTGATGTTTTCTAACCAATTTCAACTATTTAACCCACTTGCCCTATTTTGTGCCTATTTGCTGGTTTTAGT
TTCTGATGTTTCGGTTGTGTGTGCAACAACCTGTTGAGTTGATCATAACATCCAAAAGTATAGTTTTATTGTCTAA
AGTTTGTGAAAACCTTTTCCATCCCTTAAAACCTCCCTGCCTATGGCTGAAACTATAAATGAAATTTTTTCATAAAC
ATTTCTTGAGAGAGTTTCAGTTAAAAAAGAAAAAATCAGCGTCATTTGTTCCCTGCCAAGCATCGTGCAATAAGT
GAATTTCTTGCCCTACTTCATAATCTCTAAGTTTGGGGTATCTCCAAGCATGTATGTAGAGAAAGGACTTTGCCG
CTTTTTAAAACCTAGTGTCACAGTCTCTCTTGGGAGGAAACAATGAATTGGTTTCATTTCTCTCAGTGTTTTACCC
TGTTACATGTTCTGTTATTTAATGTTGTTATCTCAAGCTCCTATCTCTTGATGTTTTCTTGTCATCTTGAAGGCT
CCATGGAATGAGATAAAGCATTGACCCACCACAGGACATCTCATGAAGCCATGTTCAGGGTAGGAGCTCCACGCA
CATCACACCCATTGTGAGGTGCTCTCCCTCACCCCTGTAAGCCAGACAGTTTGTTCAAAACCTGCAGCAAAGAG
AAGCATCAGTCTAACAAGCCAGAACCTATTTTGTGCCACCCATTTAGGTATCACTACCATGAACTATAGGGAAAA
GAAATCACCTACTCCCTGACACTGTGTTGTACCCCTTCATCCAAAAGTCAGCTTGCTTCTCTGACCACTTACAGCT
TTCTCACATGAGTTGCTTCACATTTTTCATCATCTTTAAGGACTTCTTATAAGGAAAGATGTATCGTATCGCAGT
CATCTGAGTTAGTTTCTCTCCATCACCTCATGAGTACTTAAAAATTAGACATCAACTTTCAAGAGTTCTTTAGA
GAGTGTGCTCTAGCTGGCTGCCTGCTACCCCAAAGCTCTGAAAGAGTAAGGTTGAAGTGCTGGAACATGCTCAGA
TTGTTTTTTAGTTACTCAAAAGCCCCCTCTGTGTCTGAATGTGAAAGCTCTTCCGTTCTGCTTACTGCAGCCA
TTCTGTGTGTGTGGTTTCAGACCTGGCCTAGGGCCGGTGATGTGGATGAGTGAAGGGAGCCAGGTACACGGCAGC
AGGGCAGAGGAGACTATGGGGAGCCACCGCCTACACAGTAGGGGCAGTAGCCCCAGCTCCACGCCTGTTGCCA
TGTGGAAGAGTGGCCCTAGGGTGGCCACAGCTTTGATTTTTCAAGAGACAAGAAACCTAGATGTTTTTTGGTGCC

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FIGURE 3792B

ATCTCTCCATTTATAAATGTTGGCAACCAATTGGAACACTTTCAGAGACCATGTGCAGGTGAGCTGTGTCTCTA
GGCTGCCAGCTCACAGCCCCACCCAGGGCCCTGTAAGCTGTGCAGTGTGAGGGCCTGGCTTCCCCGGACACAC
CTGGAGCAGCCTCTGAGTCTTACCCGTAATGGAGCCGGCCAACCCTGTGTGTTATGTTGCTGTGCTCCTGTTTT
TAACCATAATGTTCTGTCCCATAGCAGTCATTACACATGTGAAGAAGACACAAGAATCAAAGTACAAGTTGCCTC
AATACATGCTAATAACTAAGCTTCTATTTTCACAGGACTGATCGATGCACACCTTTATAGCTTGACCATATGCTG
TCATGAAAGTAGCACCCCGACGGTGCTTGCTTTACTAAGTCACCGTGTGTGGATGCTTTTGTGCGATTTTGCTTC
ACTGTGAGTAGCATGGGAAAAGGGTCCACGTCTCCAAAAGACTCTTCCACTTGTTTGTCCACAGCCCTAAGTGC
CACATTGCTGTTGGATGCTCCCGGGATGCCTTCTAGAAGGGGGCCTCCACCTTAAGTTTCAGGCGCCATCTGATA
GCCTTTTCTGCAGGCTTTCATGTCCTTAGCTGACCTCCTTTATCTTGCAAACCCCTGCCCCCTGCTGTCCAGGGA
GGACGGGCTTCTGTAGAGGCTTCTGGGAAATGAGCTGTCTGCAGGAGGTGAAGCAGTGTTTTCTTGGAATGTTT
GAGGACCTGCAATAGAAGATGTTGCCTTTATGGCCCTAGAGAAAGTCAAGGAACATGGGGACCAACAAAGCATT
CCAGTTGTAAGAATATGTCAGAAGAGTGCTCGGTTAGCCACGGTGCCAAAACCTCAAACAAGTTCCCCGGTGGA
ATGACGTGGCCATTGGAGGGCTGCAGGTGCTCCTCTCTGTATGTGCCCCGCGCATTTCTTGCCCTCATCTGAGA
TCTGGTGTGAGAGTTCTCTGCTCCTGTTGGCAAATCGCACCTTATCTGAACATTTGTTCCAGCCACCTTTTGCAC
ATGGATTCCGTACCTTGCACTAGCAATGTCTACCTTCAGTAACGTCGTTCTTTTTCCACCTGTATTCTCAATGAT
CCCTTCCTCCCCATATGCCACCTTCCCCCAAAGCTGATAGGGCAGAGGTGCACCTTATGAAACTGGCACTTGAC
TGAACAGAAGGAAACAGCTGTACCTCTAAGCTCCTTTACAGAAATCGTCATCTGCCTTGGAATGCAATAGTTC
TTATTTGCCAAAGAACAGTGAATTGGGCCCCAAAGATCAAACACAGCATTTCATGTAATCAGAATTCTAAACGCAC
AACTCGGGAGCTGTGCACGGCTTCTCAAGTGATTGAGTTGCAGAACCAAGAGCAAACTCGCCTGTTTTTGTCT
CAATGGCACCCATGAGCTTTCCAATAGTATAGTTTTCTTTCTTTCTTGTCTGTTGAAGGTAACGTGTTCTTA
GAAAAGAAAATGCTGCATAGGAAAACCTGAGATGCCTTTTATTCCAACGTGTTTGATCCCTGTCACTCATTATTCT
GTACTTTTTATTGTACATTCTATTCTGTGAATTATTGTGCCCTTTAAGTGTTGTAAAATCGTTTTGGAATTTGTG
CCTGCTAGTTATGCAATAAACAGGCTCTACAAGTG

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FIGURE 3793

MSKRLRSSEVCADCSGPDPSWASVNRGTFLCDECCSVHRS�GRHISQVRHLKHTPWPP TLLQM VETLYNNGANSI
WEHSLDPASIMSGRRKANPQDKVHPNKA EFIRAKYQMLAFVHRLPCRDDDSVTAKDLSKQLHSSVRTGNLETCL
RLLSLGAQANFFHPEKGNTPLHVASKAGQILQAELLAVYGADPGTQDSSGKTPVDYARQGGHHELAERLVEIQYE
LTDRLAFYLCGRKPDHKNQHF IIPQADSSLDLSELAKAAKKLQSLSNHLFEELAMDVYDEVDRRETDAVWLA
TQNHSAVLTETTVPFLPVNPEYSSTRNQGRQKLARFNAHEFATLVIDILSDAKRRQGGSSLSGSKDNVELILKT
INNQHSVESQDNDQPDYDSVASDEDTDLETTASKTNRQKLQTLQSENSNLRKQATTNVYQVQTGSEYTDTSNHSS
LKRRPSARGSRPMSMYETGSGQKPYLPMGEASRPEESRMRLQPFPAHASRLEKQNSTPESDYDNTPNDMEPDGMG
SSRKGRQSRMVWPGDGLVPDTAEPHVAPSP TLPSTEDVIRKTEQITKNIQELLRAAQENKHDSYIPCSERIHVAV
TEMAALFPKKPKSDMVRTSLRLLTSSAYRLQSECKKTLPGDPGSP TDVQLVTQQVIQ CAYDIAKAAKQLVTITTK
ENNN

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FIGURE 3794

GGCACGAGGGTTGCTTTTATACTCAGAAATGGAAATACCTGATCTTGGCTAGTTTTGTTATAAGATATTGATTTCATTTAGATTTCCCTCCACGAGGTCAGCAACTATCATGTTCTTATGTAACTTAGGCCAAGGCCAGAGTTATCATA GTCCCTAGGTTGCTACGGCTTATCATGTTGCTTGGTAAAAAGGTGATCGCAGGTTCTCAGACGAGTTTACTTTACAT GAGATGGAATCAGGCAGAGAGGGCTGGGATGATGGAGAAAAGCTCGAGGTGAAGTTTTAAAAAAAAGTTGTGGAAA GGAAAGTTCCAAAGAGGTGGTTTTCTGAGGAAGTCAGAGCGCCAGGGCCAGAGCAGTCAGTAATGGGTGAATGAG GTTGTGTTGGAAAGTCGGTGTGACAGACACATGGATGCCATCTACTTCTAGGTTGCTGGTGGGTATTAAATATGCA CAATATTCCATAGCTCACTGAGGATTTTAAATTATAAGCATAGGATTTTATATTTGGGGTGAAAGAATTATCT GGCACATTAGGTATTGGAGTTTAAAAAAAAGCCAAATTTACAGTCTTAATAACTTTTTTAAAAAAAACATAA AGGCGCTTCATGTCCAGTGTGTGGCCCTTCTGAACTTATGGTCATCTCTCCCACTGAAACCAAGGTCTTTTCAA ATGTGGCTAAATGGGGATGAGGAGACACGGGTAGGACTTTCTTGGTGTGTGTGCATTCTTTAAAGAGCCAAGTTG CTTCCGGGGAAACAGCCAGGAAAATGGTCAAGATTATTTTAGAGGTTATTTATTGGGGATTTTAAGAACTAATA ACATCTTGAGTTATTTTTAATTCAGGGGGATGTGGAAAGGTTTGCAATTGTCAAGTGTTTTGTGTAGCTTAGTA TCCATAAGGGAAACCTTAGACTATAGACATAACTACAAAGCCAGTGCAGCTTTTGTCTGTATGTTGTGGGG ATCAACTTTACACATAGCAAGCACATGGCCTCCCTGATGTCAGGATGCCTTTGTTAGGATCTGTATTGCCCC T AATTTTGTGAAATCTTTTTCTTCTTCTTCTTGAAGTTCCAAAATATAGTTTATTGTATCTTTCATCACTA AAAATTTGTTCCTTTTTCACTATGGGCAGTTCACACAAGGCAAAAACCTATTGAACAGTTGGTTTTAGTGTGTGT ATAATTTGCTGTATATCAAACTAATTTTGACAAGTTTTCATCCTAAGCCTCAAATCATGTAATTAATAATTTGC CTGTTTTATTTATGACCTAATTGTGATTCTTTTATTAATAAAAGCTAATGGGAAAAGGATCCCTGATTAAAGCTGAT GACTAGACCTACAATTAATTTTCTGTCAGTATATGAAGTATTGTACCAGAGTATTAAAAGATATGTAATATTTTA TTGATAAATCTATCCTTTAAAAGGAATACGTTTTAGGATGTCATCATTTTGTATGTGAATCATGTAAATGTTGATA ATATGCTGTTTTATTATACATTTAGTGTTTCAAGAGATTCACCTAATTGCCTTTTGGCCACGTATATTATGTAGT CTATTTGCAACTGTTCTTAAAAAATGACATTAAAAGAATAGTTTATGTAGAGAAACATTAGTGATGTTAATTG TCTCCCCACCTATATTTATGGGTGTTAGCGCAACTGCTTTGCTAGTTGCAAAGCTGTATTATCAGAGTAAAAGTG TATTTGTAACTGTATGGGAACATAAAATTAGGAATAAAACCATTTTCTTATAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3795

MCLVKGDRRFSDEFTLHEMESGREAGMMEKARGEVLKKKLWKGKFQGGF

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FIGURE 3796A

GCCCTGCTTCCCCTTGACCTGCGCCGGGCGGCCATGGACTTGTACAGCACCCCGGCCGCTGCGCTGGACAGGTT
CGTGCCAGAAGGCTGCAGCCGCGGAAGGAGTTCGTAGAGAAGGCGCGGCGCGCTCTGGGCGCCCTGGCCGCTGC
CCTGAGGGAGCGCGGGGGCCGCTCGGTGCTGCTGCCCCGCGGGTGTGAAACTGTCAAGGGAGGCTCCTCGGG
CCGGGGCACAGCTCTCAAGGGTGGCTGIGATTCTGAACCTGTTCATCTTCTCGACTGCTTCAAGAGCTATGTGGA
CCAGAGGGCCCCGCGTGCAGAGATCCTCAGTGAGATGCGGGCATCGCTGGAATCCTGGTGGCAGAACCCAGTCCC
TGGTCTGAGACTCACGTTTCTGAGCAGAGCGTGCCTGGGGCCCTGCAGTTCGCGCTGACATCCGTAGATCTTGA
GGACTGGATGGATGTTAGCCTGGTGCCTGCCTTCAATGTCTGGGTGAGGCCGGCTCCGGCGTCAAACCCAAGCC
ACAAGTCTACTCTACCCCTCCTCAACAGTGGCTGCCAAGGGGGCGAGCATGCGGCCCTGCTTACAGAGCTGCGGAG
GAACTTTGTGAACATTGCCCCAGCCAAGTTGAAGAACCTAATCTTGCTGGTGAAGCACTGGTACCACCAGGTGTG
CCTACAGGGGTTGTGGAAGGAGACGCTGCCCCGGTCTATGCCCTGGAATTGCTGACCATCTTCGCTGGGAGCA
GGGCTGTAAGAAGGATGCTTTAGCCTAGCCGAAGGCCTCCGAAGTGTCTGGGCTGATCCAACAGCATCAGCA
CCTGTGTGTTTTCTGGACTGTCAACTATGGCTTCGAGGACCCTGCAGTTGGGCAGTTCCTGACGCGGCAGCTTAA
GAGACCCAGGCCTGTGATCCTGGACCCAGCTGACCCACATGGGACCTGGGGAATGGGGCAGCCTGGCACTGGGA
TTTGCTAGCCCAGGAGGCAGCATCCTGCTATGACCACCATGCTTTCTGAGGGGATGGGGGACCCAGTGCAGTC
TTGGAAGGGGCGGGCCCTTCCAGTGCTGGATGCTCAGGTTTGGGCCACCCATCCAGCTAGACCCTAACAGAA
GACCCCTGAAAACAGCAAGAGCCTCAATGCTGTGTACCCAAGAGCAGGGAGCAAACCTCCCTCATGCCAGCTCC
TGGCCCCACTGGGGCAGCCAGCATCGTCCCTCTGTGCCGGGAATGGCCTTGGACCTGTCTCAGATCCCCACCAA
GGAGCTGGACCGCTTCATCCAGGACCACCTGAAGCCGAGCCCCAGTTCCAGGAGCAGGTGAAAAGGCCATTGA
CATCATCTTGCGCTGCCTCCATGAGAACTGTGTTACAAGGCCTCAAGAGTCAGTAAAGGGGGCTCATTGGCCG
GGGCACAGACCTAAGGGATGGCTGTGATGTTGAACATCATCTTCTCAACTGCTTCACGGACTACAAGGACCA
GGGGCCCCCGCGCAGAGATCCTTGATGAGATGCGAGCGCAGCTAGAATCCTGGTGGCAGGACCAGGTGCCAG
CCTGAGCCTTCAGTTTCTGAGCAGAATGTGCCTGAGGCTCTGCAGTTCCAGCTGGTGTCCACAGCCCTGAAGAG
CTGGACGGATGTTAGCCTGCTGCCTGCCTTCGATGCTGTGGGGCAGCTCAGTTCTGGCACCAAACCAAATCCCCA
GGTCTACTCGAGGCTCCTCACCAGTGGCTGCGAGGAGGCGAGCATAAGGCCTGCTTCGCAGAGCTGCGGAGGAA
CTTCATGAACATTGCCCCCTCAAGCTGAAGAACCTGATTCTGTGTTGGTGAAGCACTGGTACCGCCAGGTTGCGGC
TCAGAACAAGGAAAAGGACCAGCCCTGCCTCTGTGCCCCAGCCTATGCCCTGGAGCTCCTCACCATCTTTGC
CTGGGAGCAGGGCTGCAGGCAGGATTGTTTCAACATGGCCCAAGGCTTCCGGACGGTGTGGGGCTCGTGCAACA
GCATCAGCAGCTCTGTGTCTACTGGACGGTCAACTATAGCACTGAGGACCCAGCCATGAGAATGCACCTTCTTGG
CCAGCTTCGAAAACCCAGACCCCTGGTCTGGACCCCGCTGATCCACCTGGAACGTGGGCCACGGTAGCTGGGA
GCTGTTGGGCCAGGAAGCAGCAGCGCTGGGGATGCAGGCCTGCTTTCTGAGTAGAGACGGGACATCTGTGCAGCC
CTGGGATGTGATGCCAGCCCTCCTTTACCAAACCCAGCTGGGGACCTTGACAAGTTCATCAGTGAATTTCTCCA
GCCAACCAGCCAGTTCTGGCCAGGTGAACAAGGCCGTTGATACCATCTGTTTCAATTTTGAAGGAAAAGTCTGCTT
CCGGAATTCTCCCATCAAAGTGATCAAGGTGGTCAAGGTGGCTCTTCAGCCAAAGGCACAGCTCTGCGAGGCCG
CTCAGATGCCGACCTCGTGGTGTTCCTCAGCTGCTTCAGCCAGTTCACTGAGCAGGGCAACAAGCGGGCCGAGAT
CATCTCCGAGATCCGAGCCAGCTGGAGGCATGTCAACAGGAGCGGCAGTTTCAGGTCAAGTTTGAAGTCTCCAA
ATGGGAGAATCCCCGCGTGTGAGCTTCTCACTGACATCCAGACGATGCTGGACCAGAGTGTGGACTTTGATGT
GCTGCCAGCCTTTGACGCCCTAGGCCAGCTGGTCTCTGGCTCCAGGCCAGCTCTCAAGTCTACGTCGACCTCAT
CCACAGCTACAGCAATGCGGGCGAGTACTCCACCTGCTTCACAGAGCTACAACGGGACTTCATCATCTCTCGCCC
TACCAAGCTGAAGAGCCTGATCCGGCTGGTGAAGCACTGGTACCAGCAGTGTACCAAGATCTCCAAGGGGAGAGG
CTCCCTACCCCCACAGCACGGGCTGGAACCTCTGACTGTGTATGCCTGGGAGCAGGGCGGGAAGGACTCCAGTT
CAACATGGCTGAGGGCTTCCGCACGGTCTGGAGCTGGTCAACCCAGTACCGCCAGCTCTGTATCTACTGGACCAT
CAACTACAACGCCAAGGACAAGACTGTTGGAGACTTCTGAAACAGCAGCTTCAGAAGCCAGGCCTATCATCCT
GGATCCGGCTGACCCGACAGGCAACCTGGGCCACAATGCCCGCTGGGACCTGCTGGCCAAGGAAGCTGCAGCCTG
CACATCTGCCCTGTGTGCATGGGACGGAATGGCATCCCCATCCAGCCATGGCCAGTGAAGGCTGTGTGTGAAG
TTGAGAAAATCAGCGGTCTACTGGATGAAGAGAAGATGGACACCAGCCCTCAGCATGAGGAAATTCAGGGTCCC
CTACCAGATGAGAGAGATTGTGTACATGTGTGTGTGAGCACATGTGTGCATGTGTGTGCACACGTGTGCATGTGT
GTGTTTTAGTGAATCTGCTCTCCAGCTCACACACTCCCTGCCTCCCATGGCTTACACACTAGGATCCAGACTC
CATGGTTTTGACACCAGCCTGCGTTGCGAGCTTCTCTGTCACTTCCATGACTCTATCCTCATACCACCACTGCTGC

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FIGURE 3796B

TTCCACCCAGCTGAGAATGCCCCCTCCTCCCTGACTCCTCTCTGCCCATGCAAATTAGCTCACATCTTTCCTCC
TGCTGCAATCCATCCCTTCCCTCCCATTTGGCCTCTCCTTGCCAAATCTAAATAGTTTATATAGGGATGGCAGAGAG
TTCCCATCTCATCTGTGAGCCACAGTCATTTGGTACTGGCTACCTGGAGCCTTATCTTCTGAAGGGTTTTAAAGA
ATGGCCAATTAGCTGAGAAGAATTATCTAATCAATTAGTGATGTCTGCCATGGATGCAGTAGAGGAAAGTGGTGG
TACAAGTGCCATGATTGATTAGCAATGTCTGCACTGGATACGGAAAAAGAAGGTGCTTGCAGGTTTACAGTGTA
TATGTGGGCTATTGAAGAGCCCTCTGAGCTCGGTGGCTAGCAGGAGAGCATGCCCATATTGGCTTACTTTGTCTG
CCACAGACACAGACAGAGGGAGTTGGGACATGCATGCTATGGGGACCCTCTTGTGGACACCTAATTGGATGCCT
CTTCATGAGAGGGCTCCTTTTTCTTACCTTTTATGCTGCACTCCTCCCTAGTTTACACATCTTGATGCTGTGGC
TCAGTTTGCCTTCCCTGAATTTTTATTGGGTCCCTGTTTTCTCTCCTAACATGCTGAGATTCTGCATCCCCACAGC
CTAACTGAGCCAGTGGCCAAACAACCGTGCTCAGCCTGTTTTCTCTCTGCCCTCTAGAGCAAGGCCACCAGGTC
CATCCAGGAGGCTCTCCTGACCTCAAGTCCAACAACAGTGTCCACACTAGTCAAGGTTTACAGCCAGAAAAACAGAA
AGCACTCTAGGAATCTTAGGCAGAAAGGGATTTTATCTAAATCACTGGAAAGGCTGGAGGAGCAGAAGGCAGAGG
CCACCACTGGACTATTGGTTTTCAATATTAGACCACTGTAGCCGAATCAGAGGCCAGAGAGCAGCCACTGCTACTG
CTAATGCCACCACTACCCCTGCCATCACTGCCCCACATGGACAAAACCTGGAGTCGAGACCTAGGTTAGATTCTCTG
CAACCACAAACATCCATCAGGGATGGCCAGCTGCCAGAGCTGCGGGAAGACGGATCCACCTCCCTTTCTTAGCA
GAATCTAAATTACAGCCAGACCTCTGGCTGCAGAGGAGTCTGAGACATGTATGATTGAATGGGTGCCAAGTGCCA
GGGGGCGGAGTCCCCAGCAGATGCATCCTGGCCATCTGTTGCGTGGATGAGGGAGTGGGTCTATCTCAGAGGAAG
GAACAGGAAACAAAGAAAGGAAGCCACTGAACATCCCTTCTCTGCTCCACAGGAGTGCCTTAGACAGCCCTGACTC
TCCACAAACCACTGTTAAAACTTACCTGCTAGGAATGCTAGATTGAATGGGATGGGAAGAGCCTTCCCTCATTAT
TGTCATTCTTGGAGAGAGGTGAGCAACCAAGGGAAGCTCCTCTGATTACCTAGAACCTGTTCTCTGCCGCTTTT
GGCTCAGCCTACAGAGACTAGAGTAGGTGAAGGGACAGAGGACAGGGCTTCTAATACCTGTGCCATATTGACAGC
CTCCATCCCTGTCCCCCATCTTGGTGCTGAACCAACGCTAAGGGCACCTTCTTAGACTCACCTCATCGATACTGC
CTGGTAATCCAAAGCTAGAACTCTCAGGACCCCCAACTCCACCTTGGATTGGCCCTGGCTGCTGCCACACACA
TATCCAAGAGCTCAGGGCCAGTTCTGGTGGGCAGCAGAGACCTGCTCTGCCAAGTTGTCCAGCAGCAGAGTGGCC
CTGGCCTGGGCATCACAAGCCAGTGATGCTCCTGGGAAGACCAGGTGGCAGGTCGCAGTTGGGTACCTTCCATT
CCACCACACAGACTCTGGGCCTCCCCGCAAAATGGCTCCAGAATTAGAGTAATTATGAGATGGTGGGAACCAGAG
CAACTCAGGTGCATGATACAAGGAGAGGTTGTCTCTGGGTAGGGCAGAGAGGAGGGCTTGCTCATCTGAACAGG
GGTGATTTTCAATCCAGGCCCTCAGTCTTTGGCAATGGCCACCCTGGTGTGGCATATTGGCCCCACTGTAACTT
TTGGGGGCTTCCCGGTCTAGCCACACCCCTCGGATGGAAAGACTTGACTGCATAAAGATGTCAGTTCTCCCTGAGT
TGATTGATAGGCTTAATGGTCACCCATAAAACACCCACATATGCTTTTCGATGGAACCAGGTAAGTTGACGCTAA
AGTTCTTATGAAAAATACACACGCAATAGCTAGGAAAACACAGGGAAAGAAGAGTTCTGAGCAGGGCCTAGTCT
TAGCCAATATTAACACATACTATGAAGCCTCTGATACTTAAACAGCATGGCGCTGGTACGTAAATAGACCAATGC
AGTTAGGTGGCTCTTTCCAAGACTCTGGGGAAAAAAGTAGTAAAAAGCTAAATGCAATCAATCAGCAATTGAAAG
CTAAGTGAGAGAGCCAGAGGGCTCCTTGGTGGTAAAGAGGGTTGCATTTCTTGACCCAGAAGGCAGAGAAAG
TGAAGACCAAGTCCAGAACTGAATCCTAAGAAATGCAGGACTGCAAGAAATTGGTGTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTGTGTTAATTTTTAAAAAGTTTTTATT

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FIGURE 3797

CGGCAGCCAGCTGAGAGCAATGGGAAATGGGGAGTCCCAGCTGTCTCGGTGCTCAGAAAGCTGGGTTGGTT
TATCCAGGAATACCTGAAGCCCTACGAAGAATGTCAGACACTGATCGACGAGATGGTGAACACCATCTGTGACGT
CCTGCAGGAACCCGAACAGTTCCCCCTGGTGCAGGGAGTGCCATAGGTGGCTCCTATGGACGGAACAGTCTT
AAGAGGCAACTCCGATGGTACCCTTGTCCTCTTCTTCACTGACTTAAACAATTCCAGGATCAGAAGAGAAGCCA
ACGTGACATCCTCGATAAACTGGGGATAAGCTGAAGTTCTGTCTGTTCACGAAGTGGTTGAAAAACAATTCGA
GATCCAGAAGTCCCTTGATGGGTTACCATCCAGGTGTTACAAAAATCAGAGAATCTCTTTCGAGGTGCTGGC
CGCCTTCAACGCTCTGAGCTTAAATGATAATCCCAGCCCTGGATCTATCGAGAGCTCAAAAGATCCTTGATAA
GACAAATGCCAGTCTGGTGAGTTTGAGTCTGCTTCACTGAATCCAGCAGAAGTTTTTGACAACCGTCTCGG
AAACTAAAGGATTTGATCCTCTTGATAAAGCACTGGCATCAACAGTGCCAGAAAAAATCAAGGATTTACCTC
GCTGTCTCCGATATGCCCTGGAGCTGCTTACGGTGTATGCCCTGGGAACAGGGGTGCAGAAAAGCAACTTTGACAT
TGCTGAAGGCGTCAGAACCCTACTGGAGCTGATCAAATGCCAGGAGAAGCTGTGTATCTAATGGATGGTCAACTA
CAACTTTGAAGATGAGACCATCAGGAACATCCTGCTGCACAGCTCCAATCAGCGAGGCCAGTAATCTTGATCC
AGTTGACCCAACCAATAATGTGAGTGGAGATAAAATATGCTGGCAATGGCTGAAAAAGAAGCTCAAACTGGTT
GACTTCTCCCAACCTGGATAATGAGTTACCTGCACCATCTTGAATGTTCTGCCTGCACCACTCTTTCAGACCCC
AGGCCACCTTCTGGATAAGTTTCATCAAGGAGTTTCTCCAGCCCAACAAATGCTTCTTAGAGGAGATTGACAGTGC
TGTTAACATCATCCGTACATTCTTAAAGAAAAC TGCTTCCGACAATCAACAGCCAAGATCCAGATTGTCCGGGG
AGGATCAACCGCCAAAGGCACAGCTCTGAAGACTGGCTCTGATGCCGATCTCGTCGTGTTCCATAACTCACTTAA
AAGCTACACCTCCCAAAAAACGAGCGGCACAAAATCGTCAAGGAAATCCATGAACAGCTGAAAGCCTTTTGAG
GGAGAAGGAGGAGGAGCTTGAAGTCAGCTTTGAGCCTCCCAAGTGAAGGCTCCCAGGGTGCTGAGCTTCTCTCT
GAAATCCAAAGTCTCAACGAAAGTGTACGCTTTGATGTGCTTCTGCTTTAATGCACITGGGTGAGCTGAGTTC
TGGCTCCACACCCAGCCCCGAGGTTTTATGCAAGGCTCATTGATCTGTATAAATCCTCGGACCTCCCGGGAGGAGA
GTTTTCTACCTGTTTACAGTCTGCAGCGAACTTATTGCTCCCGGCCACCAACTAAAGGATTTAATTCG
CCTGGTGAAGCACTGGTACAAAGAGTGTGAAAGGAACTGAAGCCAAAGGGGCTTTTGCCCCAAAGTATGCCTT
GGAGCTGCTCACCATCTATGCCTGGGAGCAGGGGAGTGGAGTGCCGATTTTGACACTGCAGAAGGTTTCCGGAC
AGTCTGGAGCTGGTCACACAATATCAGCAGCTCTGCATCTTCTGGAAGGTCAATTACAACCTTTGAAGATGAGAC
CGTGAGGAAGTTTCTACTGAGCCAGTTGCAGAAAACAGGCCTGTGATCTTGGACCCAGCCGAACCCACAGGTGA
CGTGGGTGGAGGGGACCGTTGGTGTGGCATCTTCTGGCAAAAGAAGCAAAGGAATGGTTATCCTCTCCCTGCTT
CAAGGATGGGACTGGAAACCAATACCACCTTGGAAAGTGCCGACAATGCAGACACCAGGAAGTTGTGGAGCTAG
GATCCATCCTATTGTCAATGAGATGTTCTCATCCAGAAGCCATAGAATCCTGAATAATAATTCTAAAAGAACTT
CTAGAGATCATCTGGCAATCGCTTTTAAAGACTCGGCTCACCCTGAGAAAGAGTCACTCACATCCATTCTTCCCT
TGATGGTCCCTATTCTCTCTTCCCTTGCTTCTTGGACTTCTTGAATCAATCAAGACTGCAAACCTTTTCATAAA
GTCTTGCTTGCTGAATCCCTCTCTGCAGGCAGCCTGCCTTTAAAAATAGTTGCTGTGATCCACTTTATGTGCA
TCTTATTTCTGTCAACTTGTATTTTTTTCTTGTATTTTTTCCAATTAGCTCCTCTTTTTCTTCCAGTCTAAAA
AAGGAATCCTCTGTGTCTTCAAAGCAAAGCTCTTTACTTTCCCTTGGTTCTCATAACTCTGTGATCTTGTCTC
GGTGCTTCCAACCTCATCCACGTCCTGTCTGTTTCTCTGTATACAAAACCTTTCTGCCCCCTGCTGACACAGACA
TCTCTATGCCAGCAGCCAGCCAACCTTTTATTAGAATTTCAAGCTCTCAAAGGCTCAGATTATAACTGTTGT
CATATTTATATGAGGCTGTTGTCTTTTCTTCTGAGCCTGCCTTTCTCCCCCCCAGGAGTATCCTCTTGCC
AAATCAAAAGACTTTTTCTTGGGCTTTAGCCTTAAAGATACTTGAAGGTCTAGGTGCTTTAACCTCACATACCC
TCACCTAAACTTTTATCACTGTTGCATATACCAGTTGTGATACAATAAAGAATGTATCTGG

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FIGURE 3798

AGTGAGAGGGTCCAAGCCTGGTAAGAATGTCCAGCTTCAGGAGAATGAAATCAGAGGACTGTGCTTAAAGTCTCG
TGAAATCTTTCTCAGTCAGCCTATCCTACTAGAACTTGAAGCACCACCTCAAAATATGTGGTGACATCCATGGACA
ATACTATGATTTGCTGCGACTTTTGTAGTACGGTGGTTTCCCACCAGAAAGCAACTACCTGTTTCTTGGGGACTA
TGTGGACAGGGGAAAGCAGTCATTGGAGACGATCTGCCTCTTACTGGCCTACAAAATAAAATATCCTGAGAATTT
TTTTCTTCTCAGAGGGAACCATGAATGTGCCAGCATCAACAGAATTTATGGATTTTATGATGAATGTAAAAGAAG
ATACAACATTAACTATGGAAAACTTTCACAGACTGTTTTAACTGTTTACCGATAGCAGCCATCGTGGATGAGAA
GATATTCTGCTGTCATGGAGGTTTATCACCAGATCTTCAATCTATGAGCAGATTTCGGCGAATTATGCGACCAAC
TGATGTACCAGATCAAGGTCTTCTTTGTGATCTTTTGTGGTCTGACCCCGATAAAGATGTCTTAGGCTGGGGTGA
AAATGACAGAGGAGTGTCTTCACATTTGGTGCAGAAAGTGGTTGCAAAATTTCTCCATAAGCATGATTTGGATCT
TATATGTAGAGCCCATCAGGTGGTTGAAGATGGATATGAATTTTTTGCAAAGAGGCAGTTGGTCACTCTGTTTTT
TGCGCCCAATTATTGCGGAGAGTTTGACAATGCAGGTGCCATGATGAGTGTGGATGAAACACTAATGTGTTCTTT
TCAGATTTTAAAGCCTGCAGAGAAAAAGAAGCCAAATGCCACGAGACCTGTAACGCCTCCAAGGGTTGCATCAGG
CCTGAACCCGTCATTTCAGAAAGCTTCAAATTATAGAAACAATACTGTTCTATACGAGTGACCGATTATGCTTTC
TTTGGCCTACATTTCTTTATTCTGCGGTGAAGTTGAGGCTTATAAGTTAAACAAAGGAACCTAATTACTGTCCAC
CAGTTTATACAGAACTCACAGTACCTATGACTTTTTTAACTAAGATCTGTTAAAAAAGAAATCTGTTTCAACAG
ATGACCGTGTAATAACCGTGTGGTGAATGAATTCAGACTTATTAAATGATGAACCTTGT

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FIGURE 3799

MEQIRRIMRPTDVPDQGLLCDLLWSDPKDVLGWGENDRGVSETFGAEVVAKFLHKHDLDLICRAHQVVEDGYEF
FAKRQLVTLFSAPNYCGEFDNAGAMMSVDETLMCSFQILKPAEKKKPNATRPVTPPRVASGLNPSIQKASNYRNN
TVLYE

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FIGURE 3800

TCCTCTAATTGGGACTCCGAGCCAGGGCTATTTCTCGCGCTGGCGCGGTTCCAAGAAGCATCCCAGCCATCACTC
TTTCACCTGCTCCTTAGAGAAGGGAAGATGAGCGAGTCGAGCTCGAAGTCCAGCCAGCCCTTGGCCTCCAAGCAG
GAAAAGGAGGGGCACTGAGAAGCGGGGCCGGGGCAGGGCCGCGCAAGCAGCCTCCGATGAGTCTGGGACAGCGCTT
GTAGGGAGTCAGAAGGAGCCCAGCGAAGTGCCAACACCTAAGAGACCTCGGGGCCAACCAGGGGAAGCAAAAAC
AAGGGTGCCGCCAAGACCCGGAACACCACATAACTCCAGGAAGGAAACCAAGGGGCAGACCCAAAAAACTGGAG
AAGTAGGAAGAGGAGGGGCATCTCGCAAGAGTCTCGGAGGAGGAGCAGTGAACCGTGCGTGCCGCTGCTCCTCA
CTGGAGGAGCAGCTGCCTTCTGGGACTGGACAGCTTTGCTCCGCTCCCAACCGCCCTCGCCCCCTCCGCAGGCCCA
CCATCACCACCGCCTCTGGCCGCCACCCCATCTTCCACCTGTGCCACACCACCACACTACGCAGCACACCAGC
CACTGCAGGGCTCCCATGGGCTGAGTGGGGAGCAGTTTCCCTGGGCTCAGTTCCCAGCTCCCCCGCCACCC
ACGCATACACATGCCCTCCTGGACAAGGCTAGCATCTCACTTAGCCGCACCCTGCACCTGCTGCGTCCCCACT
CCGTTGGTGGTGGGGACATTGCTCTCTGGGCTTTTGGTTTGGGGGCGCCCTCTCTGCTTCACTGTTCCCTCTGGC
CTCCCATAGTGGGGCCTGGGAGGGTTCCCTGGGCTTAAAGGGGGCCCAAGCCCCATCTCATCCTGGCAGCCCT
ACTCCACTGCCCTGGCAGCAGCAGGTGTGGCCAATGGAGGGGGTGCTGGCCCCAGGATTCCCCAGCCAACT
GTCTTTGTACACACGTGGGGCTCACACTTTTCATCCTTCCCCACCTTCCCTAGTCCCTGCACTAGGTTGGACAGC
CCCCCTTCGGCTACAGGAAGGCAGGAGGGGTGAGTCCCCTACTCCCTCTTCACTGTGGCCGCAGCCCCCTTGCCCT
CCGCTTCGGATCGAGTACATATTGTGGTGATGGAGATGCAGTCACTTATTGTCCAGGTGAGGCCACAGAGCCCTG
TGTCCGCCGCTGAGGTGGGCTGGGGCTGCTCCCCTAACCTACTTTGCTTCCGCCACTCAGCCATTTCCCCCTC
CTCAGATGGGGCACCAATAGCAAGGAGCTCACCTGCCCCTCCCAACCCGCTCCTGCTCTTCCCTGCCCTCA
AGGTTCTGGTTCCATTTTCTCTGTCCACAACTACCTCTGAACAGTTGTGTTGTTTTTGTTCATGTTCCAT
TCTTCCACATCCGTCATTGCTGCTGCTACCAGCGCCAAATATTATCCTCCTCACTGCCTCCTGTTCTGCCACGATC
CCCTCCCGCAAGATACTCTTTGTAGGAAGAGGGGCTGGGGCATGGCAGGCTGGGTGACCGCTACCCAGTCCC
AGGGAAGGTGGGGCCCTGCCCCCTAGGATGCTGCAGCAGAGTGAGCAAGGGGTCCCGAATCAACCATAAAGGGCGT
AGGGGCCACCTCCTCCCCCTGTTCTGTTGGGGAGGGGTGACCATGATTGTCCAGCCTGGGGCTCCCCCTCTGG
TTTCCTATTTGCAGTTACTTGAATAAAAAAAATCCTTTTCTGG

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FIGURE 3801

MSESSSKSSQPLASKQEKDGTEKRGRGRPRKQPPVSPGTALVGSQKEPSEVPTPKRPRGRPKGSKNKGAATRKT
TTTTGRKPRGRPKKLHRRRRKRRASRRSPRRRSSDPCVPPAPHWRSSFLGLDSFAPLPPPPFLPQAHHHHRLWP
PPPSSTCALTTTLHSTPAAAGLPWAEWGAVFPWPQFPAPPAHPRIHTCPPGQG

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FIGURE 3802

GCGCTGGCGCGGTTCCAAGAAGCATCCCAGCCATCACTCTTTCACCTGCTCCTTAGAGAAGGGAAGATGAGCGAG
TCGAGCTCGAAGTCCAGCCAGCCCTTGGCCTCCAAGCAGGAAAAGGAGGGCACTGAGAAGCGGGGCCGGGGCAGG
CCGCGCAAGCAGCCTCCGATGAGTCCTGGGACAGCGCTTGTTAGGGAGTCAGAAGGAGCCCAGCGAAGTGCCAACA
CCTAAGAGACCTCGGGGCCAACCAGGGAAGCAAAAAAACTGGAGAAGTAGGAAGAGGAGGGCATCTCGCAAG
AGTCCTCGGAGGAGGAGCAGTGAACCGTGCGTGCCGCCTGCTCCTCACTGGAGGAGCAGCTGCCTTCTGGGACTG
GACAGCTTTGCTCCGCTCCACCGCCCTCGCCCCCTTCGCGAGGGCCACCATCACCACCGCCTCTGGCCGCCACCC
CCATCTTCCACCTGTGCCCACACCACCACTACGCAGCACACCAGCCACTGCAGGGCTCCCATGGGCTGAGTGG
GGAGCAGTTTTCCCTGGCCTCAGTTCCAGCTCCCCCGCCACCCACGCATACACACATGCCCTCCTGGACAA
GGCTAGCATCTCACTTAGCCGCACCCTGCACCTGCT

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FIGURE 3803

MSESSSKSSQPLASKQEKEGTEKRGRGRPRKQPPMSPGTALVGSQKEPSEVPTPKRPRGQPKGSKKNWRSRKRRRA
SRKSPRRRSSEPCVPPAPHWRSSCLLGLDSFAPLPPPSPLPQAHHHHRLWPPPPSSTCAHTTTLRSTPATAGLPW
AEWGAVFPWPQFPAPPAHPRIHTCPPGQG

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FIGURE 3804

GCATCCCAGCCATCACTCTTTCACCTGCTCCTTAGAGAAGGGAAGATGAGCGAGTCGAGCTCGAAGTCCAGCCAG
CCCTTGCCCTCCAAAGCAGGAAAAGGAGGGCACTGAGAAGCGGGGCCGGGGCAGGCCGCGCAAGCAGCCTCCGATG
AGTCCTGGGACAGCGCTTGTAAGGAGTCAGAAGGAGCCCAGCGAAGTGCCAACACCTAAGAGACCTCGGGGGCAA
CCAAAGGGAAGCAAAAACAAGGGTGCCGCCAAGACCCGAAAAACCACCATAACTCCAGGAAGGAAACCAAGGGGC
AGACCCAAAAAACTGGAGAAGTAGGAAGAGGAGGGCATCTCGCAAGAGTCCTCGGAGGAGGAGCAGTGACTTCTG
GGACTGGACAGCTTTGCTCCGCTCC

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FIGURE 3805

GATCCCTGAGCGTGTGGCAGCAGTGCGGTCGTGGTCCCTCCCTATGCAGCCTGGTTTCTAGCGTGACACGCCCTT
GACTTGAGGACCATGAACCGCAGCCGCCAGGTGACGTGCGTGGCTGGGTCCGCTGCGGCGTGGCCAAAGAGACA
CCAGACAAGGTAGAGCTGAGTAAAGAAGAAGTAAAACGCCTCATTGCTGAGGCAAAGGAGAAATTGCAAGAAGAA
GGTGGTGGCAGTGATGAAGAGGAGACAGGCAGTCCTTCAGAAGATGGCATGCAGAGTGCACGCACCCAGGCACGC
CCAAGAGAGCCCCTGGAGGATGGTGACCCAGAGGATGACAGGACGCTTGATGATGATGAGCTGGCTGAGTACGAC
TTAGATAAATATGATGAGGAAGGTGACCCAGATGCTGAGACTCTTGGTGAATCTCTCTTGGGTCTTACGGTCTAC
GGGAGTAATGATCAAGATCCTTACGTTACTCTGAAAGATACAGAACAATATGAACGTGAAGATTTCTTGATTAAG
CCCAGTGATAATCTTATAGTTTGTGGCCGAGCTGAACAGGACCAGTGCAATTTAGAGGTGCATGTTTATAATCAA
GAAGAAGACTCTTTTTATGTACACCATGATATACTCTTGTCTGCATATCCTCTGAGTGTGGAATGGCTGAATTTT
GATCCTAGCCCAGATGATTCTACTGGAAATTACATTGCTGTAGGAAACATGACCCCTGTTATTGAAGTGTGGGAC
CTTGATATAGTGGACTCTTTAGAGCCAGTCTTCACACTCGGAAGTAACTTTCAAAAAAGAAGAAAAGAAAGGA
AAGAAGAGTTCCCTCAGCAGAAGGGCATAACCGATGCTGTCTTGACCTTTCATGGAATAAGCTAATCAGAAATGTT
TTAGCAAGTGCATCAGCTGACAACACTGTAATTCGTGGGATATGTCCTTGGGGAAACCAGCAGCTAGCCTCGCT
GTACACACAGACAAGGTCCAAACACTGCAGTTTCATCCATTTGAAGCACAGACTCTGATTTCTGGCTCATATGAT
AAGTCAGTGGCTTTGTATGACTGCCGAAGTCCAGATGAAAGCCATCGAATGTGGCGATTCACTGGGCAGATAGAG
AGAGTGACTTGAATCACTTTTACCTTGTCAATTTCTTGGCCAGTACAGATGACGGCTTTGTATATAATTTGGAT
GCACGTTTCAAGATAAGCCAATTTTTACACTTAATGCACACAATGATGAAATCTCTGGTCTTGATCTTAGCAGTCAA
ATCAAGGGCTGTCTCGTGACTGCTTCAGCTGACAAATACGTGAAGATCTGGGACATCTTAGGAGATAGGCCAAGT
CTAGTTTATTCTAGGGACATGAAAATGGGAGTTCTCTTCTGTTCTTCATGTTGCCCTGATTTGCCATTTATTTAT
GCCTTTGGAGGTCAAAAAGAAGGGCTTCGGGTCTGGGATATAAGCACAGTCTCTTCAGTAAATGAAGCATTGGA
AGACGAGAGAGGCTTGTCTTGGGAGTGCAAGAAATTCATCTATTAGTGGCCCTTTTGGCAGCAGGAGCTCAGAT
ACACCCATGGAGTCTTAAATGAAGATCATCTAATTTCTGCTTACCTTAACTGGGAATTTTAAAAAGTTGGCCTAA
AAATGTTCCATGCGTGGCAGCAACCATGCAGAGTGAAGTGAACACAATTCATTTCTGACTGACATTCCTTTCTGC
AACTGCGGTGGCACCACAAATATCCGGTCTTTGTGCTTCTCAGATGGATGGTTTGTAAGGCTCTTGTGCA
TTTCTTAAAAAAGAGTAATAAAAAGGATTTTAAAAAGTAATTCCTTAAACAT

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FIGURE 3806

MNRSRQVTCVAWVRGVAKETPDKVELSKEEVKRLIAEAKEKLQEEGGGSDEEETGSPSEDGMQSARTQARPREP
LEDGDPEDDRTLDDDELAEYDLDKYDEEGDPAETLGESLLGLTVYGSNDQDPYVTLKDTEQYEREDFLIKPSDN
LIVCGRAEQDQC�LEHVYNQEEDSFYVHHDILLSAYPLSVEWLNFDPSDDSTGNYIAVGNMTPVIEVWDLDIV
DSLEPVFTLGSKLSKKKKKKGKKSSSAEGHTDAVLDLSWKNLIRNVLASASADNTVILWMSLGKPAASLAVHTD
KVQTLQFHPFEAQTILISGSYDKSVALYDCRSPDESHRMWRFSGQIERVTWNHFSPPCHFLASTDDGFVYNLDARSD
KPIFTLNAHNDEISGLDLSSQIKGCLVTASADKYVKIWDILGDRPSLVHSRDMKMGVLFSSCCPDLPFIYAFGG
QKEGLRVWDISTVSSVNEAFGRRRERLVLSARNSSISGPFGRSSDTPMES

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GGGGGAGCCCTGCAAGTTTCCCGGGGCCGCGCGCGCGCTCGCTCGCCTCCAGCCCCGCGGCCCGAGCCGCCGC
GCGCCCCGCCATGCCCTCGGCCAAACAAAGGGGCTCCAAGGGCGGCCACGCGCCGCGAGCCCCTCGGAGAAGGGT
GCCACCCGTCGGGCGGCGCGGATGACGTGGCGAAGAAGCCGCCGCCGGCGCCGACGACCCGCCGCCGCCGCC
GCGCCGACCCGACGACACCCGACGACACCCGACAGAACCAGGCGCACGGCAAGGGCGGCCACCGCGGCGGC
GGCGGCGGCGGCGCAAGTCTCTCTCTCTCTCTCCGCTCCGCGCGCGCTGCCGCCGCCGCCGCCCTCGTCTCTG
GCGTCTGCTCGCGAGGCTCGGCAGGGCGCTCAACTTTCTCTTCTACCTCGCCCTGGTGGCGGCGGCGCTTTC
TCGGGCTGGTGGTCCACCACGTCTTGAGGAGGTCCAGCAGGTCCGGCGCAGCCACCAGGACTTCTCCCGGCAG
AGGGAGGAGCTGGGCCAGGGCTTGCAGGGCGTCGAGCAGAAGGTGCAGTCTTTGCAAGCCACATTTGGAACCTTT
GAGTCCATCTTGAGAAGCTCCCAACATAAACAAGACCTCACAGAGAAAGCTGTGAAGCAAGGGGAGAGTGAGGT
AGCCGGATCAGCGAAGTGCTGCAGAAACTCCAGAATGAGATTCTCAAAGACCTCTCGGATGGGATCCATGTGGTG
AAGGACGCCCCGGGAGCGGGACTTCACGTCCCTGGAGAACACGGTGGAGGAGCGGCTGACGGAGCTCACCAAATCC
ATCAACGACAACATCGCCATCTTCACAGAAGTCCAGAAGAGGAGCCAGAAGGAGATCAATGACATGAAGGCAAAG
GTTGCCTCCCTGGAAGAATCTGAGGGGAACAAGCAGGATTTGAAAGCCTTAAAGGAAGCTGTGAAGGAGATACAG
ACCTCAGCCAAGTCCAGAGAGTGGGACATGGAGGCCCTGAGAAGTACCCTTCAGACTATGGAGTCTGACATCTAC
ACCGAGGTTTCGCGAGCTGGTGAGCCTCAAGCAGGAGCAGCAGGCTTTCAGGAGGCGGCCGACACGGAGCGGCTC
GCCCTGCAGGCCCTCAGGTGAGAAGCTTCTCAGGTCTGAGGAGTCCGTCTCCCGCTCCCGGAGGAGATCCGGAGA
CTGGAGGAAGAGCTCCGCCAGCTGAAGTCCGATTCCCACGGGCCGAAGGAGGACGGAGGCTTCAGACACTCGGAA
GCCTTTGAGGCACTCCAGCAAAAGAGTCAGGGACTGGACTCCAGGCTCCAGCAGCTGGAGGATGGGGTGCTCTCC
ATGCAGGTGGCTTCTGCGCGCCAGACCGAGAGCCTGGAGTCCCTCCTGTCCAAGAGCCAGGAGCACGAGCAGCGC
CTGGCCGCCCTGCAGGGGCGCCTGGAAGGCCTCGGGTCTCAGAGGCAGACCAGGATGGCCTGGCCAGCACGGTG
AGGAGCCTGGGCGAGACCCAGCTGGTGCTCTACGGTGACGTGGAGGAGCTGAAGAGGAGTGTTGGGCGAGCTCCCC
AGCACCGTGGAATCACTCCAGAAGGTGCAGGAGCAGGTGCACACGTGCTCAGTCAGGACCAAGCCAGGCCGCC
CGTCTGCCTCCTCAGGACTTCTTGACAGACTTTCTTCTCTAGACAACCTGAAAGCCTCAGTCAGCCAAGTGGAG
GCGGACTTGAAAATGCTCAGGACTGCTGTGGACAGTTTGGTTGCATACTCGGTCAAAATAGAAAACACGAGAAC
AATCTGGAATCAGCCAAGGGTTTACTAGATGACCTGAGGAATGATCTGGATAGGTTGTTTGTGAAAGTGGAGAAG
ATTACGAAAAGGTCTAAATGAATTGCGTGTGCAGGGCGCGGATTTAAAGTCCAATTTCTCATGACCAAAAAATG
TGTGTTTTTTTCCCATGTGTCCCCTACCCCCCAATTTCTTGTCCTCTTAAAGAGCAGTTGTCACCACCTGAAC
ACCAAGGCATTGTATTTTCATGCCCAGTTAACTTATTTACAATATTTAAGTTCTCTGCTTCTGCATTTGGTTGGT
TTCTGAAGCGCAGCCCCGTGTAATAACAGGTGGCTTTTCATGGATGTCTCTAGTCAGAGAAAAATGATAAAGGC
TTAAATTGAGGATTAACAGAAGCAGATTAACCTCAGAAATCCTGTCTGGCTGGCAGATTTCAAGTAAAAAAAAA
AAAAGTTGGGTTGGGGGGACCTTTTTCTTTCTAGTTGTCTTTAAGGAAAATTAATTTTACTTTTTTTTTTGTCT
GGCCGAAATTTTTATGAGATATCTCTCACTTGTCTTCCACTTTGAACCGGTTAAAGCTCATAGCTGTCAAGTCTG
AATGAGGAGGGGAGAAAGCCCTGGGTCTTTCTTTGAAAGGAATCCGCTGCACTTGAAGCAAGCAGCCAGCGGTTCTGAATGTG
GCGTGTGTTCTCTTCTGACGATCTGTGATATCAGAGTAACATGCAAGCAAGCAGCCAGCGGTTCTGAATGTG
AAGCACTACACCCAGCAGAGTCCCGTGGCTCTGTCCCACCTGCGGCCCATGTCTCTCTCCGAGGTCACCA
AGGAATGCACAGGTTTCGACTACCAGAAAGGGGAGTCTTGGGTTCTTTCAAAAAATTCTGAGGAGAGCTGTCT
ACAGTGGAATAGGGGGTCTCCCTGGGGAATGCAGGCCAAGTCCTTTTATTTTAACATGATGTCCATGAAGAGGTT
TGCCGTCTGGGCAGCCCTGTGCGCAAGGAGCGTGCACTACTGCGTTTTGTGTAATTGTTTGTGTATCTCCCTTCCC
TCTGAGCTGTATTGTTCTTTAATGGCTGTCTTGCCCTTCCAAAAAAATTGAAAAA

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FIGURE 3808

MPSAKQRGSKGGHGAASPSEKGAHPSGGADDVAKKPPFPAPQQPPPPPPAPHPQQHPQQHPQONQAHGKGGHRGGGGG
GGKSSSSSSASAAAAAAAASSSASCRRRLGRALNLFYALVAAAAFSGWCVHHVLEEVQQVRRSHQDFSRQREE
LGQGLQGVEQKVQSLQATFGTFESILRSSQHKQDLTEKAVKQGESEVSRRISEVLQKLQNEILKDLSDGIHVVKDA
RERDFTSLENTVEERLTELTKSINDNIAIFTEVQKRSQKEINDMKAKVASLEESEGNKQDLKALKEAVKEIQ TSA
KSREWDMEALRSTLQTMESDIYTEVRELVS LKQEQQAFKEAADTERLALQALTEKLLRSEESVSRLP EEIRLEE
ELRQLKSDSHGPKEDGGFRHSEAFEALQOKSQGLDSRLQHVEDGVLSMQVASARQTESLESLLSKSQEHEQRLAA
LQGRLEGLGSSEADQDGLASTVRS LGETQLVLYGDVEELKRSVGELPSTVESLQKVQEQVHTLLSQDQAQAARLP
PQDFLDRLSSLDNLKASVSQVEADLKMLRTAVDSLVAYSVKIETNENNLES AKGLLDDLRLDRLFVKVEKIHE
KV

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FIGURE 3809

ATGGAGGAAGTGGAAC TTGATTTGGGTTTGAAGAATAGCGTGGAGGAAGTGGAAC TTTATTTGGCTTTGAAGAAT
AGAAACTATGGAGGAGTATATGTTGGCCTACCATCTGAAGCTGTCAATATGGTGTCCAGTCAAACAAAGACGGTT
CGGAAACTTGCTCATCAGTTTGAAGGAATTTGGCTCCGTGGGACGTTGTAATGTGCACAGACATTTCCAAGGA
AATTCTAAACAGTCACCCCTTCCCTTTTGCATTCCCCCAAATCTTAAGTGTATACATAAAACCCTGGGTACATATT
GTTGTGGTAATAGAAGGGAATTGGTTAAACAGTACACTTGT TTTATGGAAC TTTCTGTGGCCACCTACGAAAGACA
AGTTAA

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FIGURE 3810

GGCACGAGGCTCTGTACCTGGGCTGGAGTCCAGTGGCGTGATCATAGCTCACTGTAGCCTCCAACCCCTGGGCT
CAAGTGATCCTCCCCACTCAGCCTACCCAAGCAGCTGGAACACAGGAGTGGTATGAGGAGCATGCCAGGGAGCA
AGAGCAGCAGCGACAACCTCAGCAGCAGTGCAGCCCCCGCCGCCAGCAGCCCCCAGGCAGCCGCCAGCGTCCCA
GACCGTTACCTAGCCCAGCGCCCCGAAAGCCGTCTCTTCTATGCAATAACACAATAGTATTACTCTACTGCGATGT
ACGGAACCTGCGGTGTGTGTACACATACTCAGTATATGCACATATTTATATACAGGAAGAAAAAGACAGACAAG
ATGGGGCTTGGTTTATAACCACTTGCCCTGTCTTCCCTAACTCCAGAAGCCAGTTTGGTGAGGGGTGGGGGTGC
GGCCACCAGGTCTGAGCTCTTCTACTGTGGAAGGCTCCAGAAGGCCCTTCACAAGGAGACCCCTCACCTGGATC
CAGTCGACTGCGGGGCTTGCCCCCTCATGTGGGCTGGCCTCCATCGGCCACGTCCAAAGCTGTCACTGCTACTGCT
TCAGGCTCACATCCCCCGACCTGATGGCGTGCCCCGCCCTCTCCCTGCGGCCCATGCCACAGGTTTCTGTGTT
TTGCTTTAGGGACAGAACCCTTAGGAAGGAAAGAACTCCCGGTCTCCAGGGTGGTATTTAGTGTCTGTGATAA
TGTCAGCAACACCTCTTCGGGGACCACTGCCCAGGATCTAATGGAAGCGGAATTGGGGCAACTGGGCCCATGTG
GCCAGAGCTCAGTTAGCCAGTGCCGGGCGGCCACAGATTACACTGACCAATCTCCTCCCTTGGCTCTGCAAGCCT
CCCACCCAGCCTTCTCTGGCTTAACCCCTTGTGGCGAAAACCTCTTCCACAGTGGCCTCCTTGGGGACCCAGAACC
CGGAGGAAGGGGCATGAGGCAGGAAGTGGGGCCGATGTCTGCAACCCAGACCACTTCGTGGAATGGGCTCTTGAC
CAAATCCCTTTTTTTGCGATTTACCCGTTCAAGCAAAACAACGTTTTGGTTAACTAAGGATTGTGCTAAAGCCGA
TACCAGGTCCCTTCACACGTGTGCACTAGGAACAGGAGCGAACAGCACAGAGAGACGCTCCCTGTGGGACGCAGCA
GCCCCGTGGCCCCGGCCAGTTCCCAGCCACCCTCCCTGGCTCTGCTCACACCAGAGATTCCATAGCAGGAGCG
GTGGTGCAAGAAGTAGGTTGAGATGAACCTCAGTTAAGTCGCCACCCCTCCTCCCACCATGGTACCCTGTAGGA
GCCCTGTATGACATCTGAGCGTGGTGGAGGTAGGAGGGTTGCCAGCTGCAGTGACCCTGCCACAGAGCAGGGTC
AGTGCAAGGTCGCTTTGGTTCCGCTTCCCTGGGCCACAGAACGGAACACAGCATAGGTTCTGCAGCAGGAGCCG
CAGTGGCAGGATGGAGGGTGCGAAGGGCAAGGAGTGCAGTGTGGGCACTTCCCTGGCCAGCCCCCGCCCTCTGGTG
CCTGCTTCTGTGACTTCAGAAGGCAGGTGGACAGAGCCTCCCTCTGGCCTTGTCTCTTCCCAGCCACAGAACG
GGCAGGGTGGCACCCGACCCAGGGGAGCAGTACCTGGTCCCCACCCCTCCTCCCAACCACTCCAAGGCCAA
GCTGGGTCCCATAGCCAGCACGGCATGGTTCTCCCTTCCCCCTTCCCAGGTCAGGGGAGTTGGACAAGTAGCA
GGTGTGTTTTTTTAAAGCACAGCCCTTTGGGAAAGCAACACATTATTGAGACTCACTGTGATTCCCCCGGGAGTC
AGACTGGCTTTGTCCTCTTCTCTGAGGGCCATGGGCCATCAGCAGGAGCTCCACATCGAGCCCCAGGCCAG
AACCCCTCCCTTTCACAGAGAGGGAACCTTTATTGCACAATTGGGTGCCTTTTAGCTTTTGTGTGTTGAAATGGG
CGTTTTGGAAGCAAGGGTCAGGGGACAGCTTCTAAAGGTGTGAGTCTCTGACCTGAGCATCTGGGCCTCGCCTGG
GCCCTTCTTCTCCCAAGGGTGGAACGTGGAGGGGCCAGCAGCACCCTGGGGTCTGCCAGGGGAGTCAAGGC
CCCGAGGTGGGGGGGCTATTCCAGGAGGAGTGGGATCTCGGCCCTGTCCAGAGCGAGTTAATGTGTCCATCTGC
CCAACCTGTCTGAGAAAGGACCTGGTTTTGGCCAGGACCTGACAAATACCCAATGGCAGCAGTGTCAACAGAC
GGGAGTCCAGCCAGGGTGGGTGCCCTTGTCAATTGAGGTTAGGGACAGCTATCCCCAGGTTATGCCTGGCCCCACC
CAGCAGGGAGTTGGGGTCCCCCACAGGCTGTGAGCTCTGTGGGCCCTGGGATGTGATCTAGCTCAGATGCCCTC
TCATCCTTGATGTCAATAGTTGAGTGCACCAAGTGGCACCCTGCGCGGCCAGGGGCACAGCCTGGTGGTGGTGG
CAATAGAACTGTGCCCCCTCCTCAGCTCCTCGCTTCCCCCTCCACAGCCCCAGCCTTACTCCACCATGCGGACAAT
CATTTTGTACGGATCACGGGAGCAATGCTGTACGGTTTTGTACACTGGTGGTTTTGTTTCTAGAAAACCCATTGT
GTCTCTGGATTTCTAGCACATTACTAAAAGAGCCTCTGCTTTGTAAAAA

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FIGURE 3811

MTSERGGGRRVASCSDPATEAGSVQRSLWFRFPQNGTQHRFCSRSRSGRMEGAKGKECTAGHSWPAPALWCLL
PVTSEGRWTEPPSGLVLFPATERAGWHPTPGEQYLVPHPLLPTTSKAKLGPIASTAWFSPSPLPRSGELDK

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FIGURE 3812

GATGCGGCTGTGATTGCTGAATTGCTCTGGGCAGGTTTGGAGTCTCTGGCAAGCTCCCCCTGACTGTGCATCCCTCT
GGAGACGAAGAGGAGGGGGAGGCCTGTCCTCTCTGGGATCCATTGGTCACATCCCCCTGAGGATTCCCGAATGCC
TACCTCCAGTGTCTCAACATGGAGTTCTGAAGTCCATGTGGCTCTTCACAGTGAATCAGGTGTTAAGGAAGATG
CAGAGACGCCACAGCAGCAACACGGATAACATTCCACCTGAAAGCTGTGACCAAGGCTGGCCCCCTCTGGGGAAC
GGGGGCCATTGAACTTGAAGACTGCAGAGCCAGCGGTCTTTGGGATCCCGAGAAACCGCAGCCAGGCGCTCAGCT
CCGAGGCGAGTGTGGATGAAGGTGGCGTCTTTGAGAGTCTGAAGGCAGAGGCAGCCTCCCCACCAGCGCTCTCT
CGGGCTTATCAGGCAGCCTCCCCACCAGCTCGTTCCCCCTCCAGCCTGGTGCTGGGCTCCTCGGCTGGCGGGGGG
ACGTGTTTCATCCAGATGCCGCGTCCAGGGAGGAAGGAGGGGGCGGGGCGAGGGGGCGCCTACCACCACCGCC
AGCCCCACCACCATTTCCACCATGGCGGCCACCGCGGGGGCTCCCTGCTGCAGCACGTGGGTGGGGACCACCGGG
GGCACTCGGAGGAGGGAGGCGACGAGCAGCCTGGGACGCCCGCCCCCGCCTGTCCGAGCTGAAGGCTGTGATCT
GCTGGCTCCAGAAAGGACTCCCCCTTCATCCTGATCCTCTGGCCAAACTGTGCTTTCAGCATAAGCTCGGCATTG
CTGTGTGCATCGGGATGGCCAGCACCTTCGCCTATGCCAACTCCACGCTTCGAGAACAGGTCTCACTGAAGGAGA
AGAGGTCAAGTGTGGTTCATCTTGTGGATCCTGGCCTTTCTGGCGGGGAACACCCTCTATGTGCTTTATACATTCA
GCTCCACAGCAGCTGTACAACAGCCTCATATTCTGAAGCCCAACCTGGAGATGCTGGACTTCTTTGACCTGCTAT
GGATTGTGGGGATCGCAGACTTTGTTCTGAAGTACATCACCATCGCCCTCAAGTGCCTCATCGTGGCCCTGCCCA
AGATCATCCTGGCCGTCAAGTCCAAGGGAAAGTTCTATCTGGTTCATCGAGGAGCTGAGCCAGCTGTTCCGATCCC
TTGTCCCCATCCAGCTGTGGTACAAATACATCATGGGTGACGACTCCTCCAACAGCTACTTCTGGGCGGGGTCC
TGATCGTTCTCTACAGCCTCTGCAAGTCCTTCGACATCTGTGGACGTGTGGGCGGAGTTAGGAAAGCCCTGAAGC
TTCTCTGTACCTCTCAGAACTATGGAGTCCGAGCCACCGGGCAGCAGTGCACAGAAGCTGGTGACATCTGCGCCA
TCTGTCAAGCCGAGTTCCGAGAGCCTCTGATTCTCCTGTGCCAGATGCTGTTGAAGGGGCACAAGAAATTGGAGC
TGGAGAAGATTGATGAAAGTGCAGGTGTGTAAAGGAAATAGAACAGTCTGCTGGGAGTCAGACCTGGAATTCTGAT
TCCAACTCTTTATTACTTTGGGAAGTCACTCAGCCTCCCCGTAGCCATCTCCAGGGTGACGGAACCCAGTGTAT
TACCTGCTGGAACCAAGGAAACTAACAATGTAGGTTACTAGTGAATACCCCAATGGTTTCTCCAATTATGCCCAT
GCCACCAAAACAATAAAACAAAATTCTCTAACACTGAT

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FIGURE 3813

MPASREEGGGRGEGGAYHHRQPHHFFHHGGHRGGSLLQHVGGDHRGHSEEGGDEQPGTPAPALSELKAVICWLQK
GLPFILILLAKLCFQHKLGIAVCIGMASTFAYANSTLREQVSLKEKRSVLVILWILAFLAGNTLYVLYTFSSQQL
YNSLIFLKPNEMLDFFDLLWIVGIADFVLKYITIALKCLIVALPKIILAVKSKGKFYLVIEELSOLFRLVPIQ
LWYKYIMGDDSSNSYFLGGVLIVLYSLCKSFDICGRVGGVRKALKLLCTSQNYGVRATGQQCTEAGDICAICQAE
FREPLILLCQMLLKGHKKLELEKIDESAGV

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FIGURE 3814

GAAGTGGCATCTTCTAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTCCTTTGGCCATGTATATGTGAATCTATAAGAAAGGTGATATCGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCGTAAGTGTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCGAGAGAATTAATG
TGCATATTGAGCACATTAAGCACTCTGAGAGCCGAGATAGCTTCCTGAAATGCATGAAGGAAAATGATCAGAAAA
AGAAAGAAGCGGAAGAGAAAGGTACCTGGGTTCAACTCAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTG
TGAGAGCCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTGTGAATTCATGGCATTAATAGGTGTTAAAAA
AAAAAAAAAAAAAGACCTCTGGGCTAT

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FIGURE 3815

MRTQRRERGEAPDICS LGLENMELFLWPCICEIYKKGDIVDIKGMGTVQKGMPRKCYHGKTGRVYNVTQHAVGIV
VNKQVKGKILAE RINVHIEHIKHSESRDSFLKCMKENDQKKKEAEEKGTWVQLKRQPAPPREAHFVRANGKEPEL
LEPIPCFMA

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FIGURE 3816

GGGGGGTCTGCGTCTTCCCGAGCCAGTGTGCTGAGCTCTCCGCGTCGCCTCTGTGCCCCGCGCCTGGCCTACCGC
GGCACTCCCGGCTGCACGCTCTGCTTGGCCTCGCCATGCCGGTGGACCTCAGCAAGTGGTCCGGGCCCTTGAGCC
TGCAAGAAGTGGACGAGCAGCCGAGCAGCCCGCTGCATGTACCTACGCCGGGGCGGCGGTGGACGAGCTGGGCA
AAGTGTGACGCCCCACCCAGGTTAAGAATAGACCCACCAGCATTTTCGTGGGATGGTCTTGATTTCAGGGAAGCTCT
ACACCTTGGTCCTGACAGACCCGGATGCTCCCGAGCAGGAAGGATCCCAAATACAGAGAATGGCATCATTTTCCTGG
TGGTCAACATGAAGGGCAATGACATCAGCAGTGGCACAGTCCTCTCCGATTATGTGGGCTCGGGGCCTCCCAAGG
GCACAGGCCTCCACCGCTATGTCGCTGGTGGTTTACGAGCAGGACAGGCCGCTAAAGTGTGACGAGCCCATCCTCA
GCAACCGATCTGGAGACCACCGTGGCAAATTCAAGGTGGCGTCCTTCCGTAAAAAGTATGAGCTCAGGGCCCCGG
TGGCTGGCACGTGTTACCAGGCCGAGTGGGATGACTATGTGCCCAAAGTGTACGAGCAGCTGTCTGGGAAGTAGG
GGGTTAGCTTGGGGACCTGAAGTGTCTTGGAGGCCCAAGCCATGTTCCCGAGTTCAGTGTTCATGTATAATAG
ATTTCTCCTCTTCCCTGCCCCCTTGGCATGGGTGAGACCTGACCAGTCAGATGGTAGTTGAGGGTGACTTTTCCT
GCTGCCTGGCCTTTATAATTTTACTCACTCACTCTGATTTATGTTTTGATCAAATTTGAAGTTCATTTTGGGGG
TATTTTGGTACTGTGATGGGGTCATCAAATTATTAATCTGAAAATAGCAACCCAGAATGTAAAAAGAAAAAACT
GGGGGGAAAAAGACCAGGTCTACAGTGATAGAGCAAAGCATCAAAGAATCTTTAAGGGAGGTTTAAAAA
AAAAAAGATTGGTTGCCTCTGCCTTTGTGATCCTGAGTCCAGAATGGTACACAATGTGATTTTATGGTGAT
GTCATCACCTAGACAACCAGAGGCTGGCATTGAGGCTAACCTCCAACACAGTGCATCTCAGATGCCTCAGTAGG
CATCAGTATGTCACTCTGGTCCCTTTAAAGAGCAATCCTGGAAGAAGCAGGAGGGAGGGTGGCTTTGCTGTTGTT
GGGACATGGCAATCTAGACCGGTAGCAGCGCCTCGCTGACAGCTTGGGAGGAAACCTGAGATCTGTGTTTTTAA
ATTGATCGTTCTTCATGGGGGTAAGAAAAGCTGGTCTGGAGTTGCTGAATGTTGCATTAATTGTGCTGTTTGCTT
GTAGTTGAATAAAAACCG

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FIGURE 3817

MPVDLSKWSGPLSLQEVDQPPQHPLHVTYAGAAVDELGKVLTPQVKNRPTSI SWDGLDSGKLYTLVLTDPDAPS
RKDPKYREWHHFLVVNMKGNDISSGTVLSDYVGS GPPKGTGLHRYVWLVYEQDRPLKCDEPILSNRSGDHRGKFK
VASFRKKYELRAPVAGTCYQAEWDDYVPKLYEQLSGK

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FIGURE 3818

GCTCTCCGCGTCGCCTCTGTGCGCCGCGCCTGGCCTACCGCGGCACTCCCGGCTGCACGCTCTGCTTGGCCTCGC
CATGCCGGTGGACCTCAGCAAGTGGTCCGGGCCCTTGAGCCTGCAAGAAGTGGACGAGCAGCCGCAGCACCCGCT
GCATGTACCTACGCCGGGGCGGCGGTGGACGAGCTGGGCAAAGTGCTGACGCCCTGTGCCGGCCTCCTGGGTGG
GACCCAGCGGAGACAGGGCCAGGGGCGGTGGGGAGGTTTACGCTGCGTGTGTCGAGGCCCCCCCCAGGCCAGAGGT
CCCGGGGTCCATGTCCCATGCCTGGGGGCCACCCCGAGCACCGGGAACCCGGCCTGTGGCGTGGCCAGGCAGGTT
CGGCCTGCGGCAGAAATTCATTCACTTTTCCCGGGCTTCAGACCCAAGAGGGACCTAGGTTTCGGAAACAGGCCGG
ATCCCCCTCTCCCCCACAGGCCAGGGCGCTGGAGAGGGACGTCGCCGGGACAGAGTAGGCTGTGGCTGCCCCGA
CGCCCCAGAGCTTCCCCTAGGGCCTCAGCATTTTAGGCCTGGTTTTTGGAGGGCTGAAGCCTCACCCGAGAGCCT
GTGACGCATTATGTAAGTGGC

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FIGURE 3819

CGGGAGCGGGGACCCGAGCCTGCAGCCGAGCTCCGCTGCCGGCCCTGGACACTCGGCTCAGCCAAGCATCCTTCC
TGGGGGCCGAGGAAGTGGGGCCACTCTGCCGTTCCGAGGACCTGGGAGGAGCCCTCGGTACCCCGGGCCCCGGGG
CCCTGGGGCACACACGTCCAGCCCAGCCCGAGCCTGCGTTTCTTGAGCCGGGATCTGGGGCGAGATGCGCCGAGG
CGGCAGTGCGCCCGAGCCCCGCGTCCTCGTCTGCCTCGGGGCGCTCCTGGCCGGCTGGGTGCGCCGTAGCCCAAGG
TTGA~~ACT~~CGCCTTACACCTGTAACCGGTGGACTTCCCTACACACCTTTGCAAGTCTTCTGTGCCGACCAGCGCC
TTCAAAGCGGGTCTTCCGCCTTTACTTTTGGAAAAGCTTTTATTTTGAATACTTGGCTGACTTACAAAAGAC
TTCCCTCACACTTGACATGATTGACAAAAGGTCTGAAATGCTTCATCTATGGTCTGCTTTGCTACGAAAAAGA
ATTGGAGGGGTGCTTACAAAATATGTAGAATGTAAAAAGATTGAACATTTATATATATTTGAATTTAATTCAC
CAGCATGCCTACTGTGCATGCCTACTGTGTGCTGGGAGTGTGACAAGCTGGGAGGAGGCTGGGGTGAGGGAGAG
GAGATGGAGCCAGGAGGTGGTGAAGTTTGCCAGGATGCAGGCAGAGCGCTACTTTTGTGTTCCCGGGTCTGCTC
CACCCAACGGGTCTCCTCTTGACGTTTCTGGAGATGGGTGTAAAGTATGCTGGAGCTTCTTAGCAGCAAGTGC
CAAGAGTTCTTAATTATTAGGCTCATACAATTTTATTTTGTCTTTTTTTTTTTTAAACCAACCATTTAAAAACAATA
ACATCTCTAGATTTCCAGTTTATCTGGAAAAATCTGAAGGTCTGGCAACACGGGGCCTGCTTTCCAGTTGGAAT
TGGGCAGTGGTCATCCTCTTATCTAGGGCATATGAGCCCAAATTTGTTCCACCTCTCCCTGTTGTAATATTTGCC
CCGCCACCTTCAGTCATGGGTGTTACCTGCTGGCCCTGCAGGCATTTGGCTGAGTAATCACTGTGCTGGGGTGTG
GGTGATGGGGGAGGACAGTTTCTAGTTGGTCATCTCTGGACGTGAAAGGTGGTTGTCAAGTATTCCCATCTCCCC
AGCTGTTTGCAGTGTTCCTGCACGATGAACACCAGGAACCTGGGAAGTGAGAAGAACCCTGGGATGAAGTCATC
CTGCTGGAATGACCTGGCTTTTCAAGCTGACTGCCACCCGCCCATGGGGAACCTATCTCCACTGCTATGGCCAGC
TATTTTTTTTCGAGCCAGGCTCTCGCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCACTGCCTGATCCTCC
CACCTCAGCCTACAAGTAGCTGGGACTACAGGCGTGCACCACCACGCCTAGCTAATTTCTAAAATTTTTTTGTAG
AGACGGTCTCTACAATCGCTTGAGCCCAGGCTGGTCTTAAACTCCTGGACCCAAGCGATCCTCCTGTCTCGGCCT
CCCAAAGTGTGGGATTATGGGTGTGAGCCACCGTGTGGGCCTTTGCCAGCTATTTTGATGCCAGACCTGCT
TCACCTTTGTGTATGATGCCAGGGGGCTTCTGAGCTTGGTGTATTTTGTGTGTGTTTTTTTAAAGTTGGG
AGTTTTTTGGGGAAAAAATTTTCTCCTGACATTCAATGCCAGACAACCTATATGCATCCACTAGCTACCCCGGA
TTGTAATCCTAGGTTATTCTTGGGAAAAGTTGCTTTAAAAAATAAATAAATGTTTGGGTAT

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FIGURE 3820

MAAGGSAPEPRVLVCLGALLAGWVAVAQG

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FIGURE 3821

AAAACAACAAATGGCGGATGACGCCGGTGCAGCGGGGGGGCACGGAGGCCCTGGTGGCCCTGGGATGGGGAACCG
CGGTGGCTTCCGCGGAGGTTTCGGCAGTGGCATCCGGGGCCGGGGTCGCGGCCGTGGACGGGGCCGGGGCCGAGG
CCGCGGAGCTCGCGGAGGCAAGGCCGAGGATAAGGAGTGGATGCCCGTCACCAAGTTGGGCCGCTTGGTCAAGGA
CATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTCTCCCTGCCCATTAAGGAATCAGAGATCATTGATTCTT
CCTGGGGGCTCTCTCAAGGATGAGGTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCCAGCCAGCGCAC
CAGGTTCAAGGCGTTTGTGTCTATCGGGGACTACAATGGCCACGTCCGTCTGGGTGTTAAGTGCTCCAAGGAGGT
GGCCACCGCCATCCGTGGGGCCATCATCTGGCCAAGCTCTCCATTGTCCCCGTGCGCAGAGGCTACTGGGGGAA
CAAGATCGGCAAGCCCCACACTGTCCCTTGCAAGGTGACAGGCCGCTGCGGCTCTGTGCTGGTGCGCCTCATCCC
TGCACCCAGGGGCACTGGCATCGTCTCCGCACCTGTGCCTAAGAAGCTGCTCATGATGGCTGGTATCGATGACTG
CTACACCTCAGCCCCGGGGCTGCACTGCCACCCTGGGCAACTTCGCCAAGGCCACCTTTGATGCCATTTCTAAGAC
CTACAGCTACCTGACCCCCGACCTCTGGAAGGAGACTGTATTTACCAAGTCTCCCTATCAGGAATTCAGTACCA
CCTCGTTAAGACCCACACCAGAGTCTCCGTGTCAGCGGACTCAGGATCCAGCTGTGGCTACAACATAGGGTTTTTA
TACAAGAAAAATAAAGTGAATTAAGCGTG

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FIGURE 3822

MADDAGAGGGGGAGGPGGPGMGNRGAFRGFGSGIRGRGRGRGRGQGQCGARGGKAEDKEWMPVTKLGRLVKE
MKIKSLEEIYLFSLPIKESIIDVFLGASLKDEVLKIMLVQKQTRAGQRTRFKAFFAIGDYNGHVGLGVKCSKEV
ATAIRGAIILAKLSIVPVHRGYWGNKIGKPHTVPCKVTGRCGSVPARLIPAHGGTGIVSAPVPKLLMMAGIDDC
YTSARGCTATLGNFAKATFDAISKTYSLTPNLWKETVFTKSPYQEF TDHLVKTHTRVSVQWTQAPAVATT

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FIGURE 3823

CGACTCGTCGCCATTCCCGGAGCAGGTGGGCTCGGCCAGGGGCGAGTATCCGTTGCTGTGTGCGGAGACACTAG
TCCCCGACACCGAGACAGCCAGCCCTCTCCCTGCCTCGCGCGGGAGAGCGTGTCCGGCCGGCCGGCCGGCGGG
GCTCGCGCAACCTCCCTCGCCTCCCTTCCCCCGCAGCCTCCGCCCGCCAGGCCCGGCCGGACTCCCAGCCCC
CGGCCTCCTCGTCTCGGTGCGCGCTGCCGCGGGCTTAACAGCCCCGTCCGCCGCTTCTTCTCTAGTTTGAGA
AGCCAAGGAAGGAAACAGGGAATAATGTCGCCATGAAGCCGAGAACCCTGCGCGCGCGACCCCCGCGGGCCC
TGAACGCCATGAGCCTGGGTCCCCGCGCGCCCGCTCCGCTCCGACTGCCGTGCGCGCCGAGGCCCGGTTGATG
CCGCTGAGCTCCCCAACGCCGCGCCACCGCCTCCGACATGGACAAGAAGACGCGCTCCAACAGCTCCTCCGCC
TCTTCGGGCAGCAGCAAAGGGCAACAGCCGCCCCGCTCCGCTCGCGGGGCCAGCCGGCGAGTCTAAACCCAAG
AGCGAATTACTAATTTTCAGCTGGATTCAATTTGTTGTCAGTTGATTCTGTAGTAAGGCCATATGTTGCCCTCTG
GAGGTGCTTGTCAACTACTCTGGATGATGGAAAGAACTCCAGTGGATCCAAGCGTTATAATCGCAAACGTG
AACTTTCTACCCCAAAAATGAAAGTTTTTAACAACAGTCCCGTCCGCTCCAGTTCACAGAAAAGCAAGACTTTTA
ACAAGATGCCTCCTCAAAGGGGCGCGGCAGCAGCAAACCTCTTAGCTCTTCTTTAATGGTGGAAGACGAGATG
AGGTAGCAGAGGCTCAACGGGCAGAGTTTAGCCCTGCCAGTTCCTCTGGTCTTAAGAAGATCAACCTGAACCACT
TGTTGAATTTCACTTTTGAACCCCGTGGCCAGACGGGTCACTTTGAAGGCAGTGGACATGGTAGCTGGGGAAAGA
GGAACAAGTGGGGACATAAGCCTTTTAACAAGGAACTCTTTTACAGGCCAACTGCCAATTTGTGGTGTCTGAAG
ACCAAGACTACACAGCTCATTTTGTGATCCTGATACATTAGTTAACTGGGACTTTGTGGAACAAGTGCGCATTT
GTAGCCATGAAGTGCCATCTTGCCCAATATGCCCTCTATCCACCTACTGCAGCCAAGATAACCCGTTGTGGACACA
TCTTCTGCTGGGCATGCATCTGCACTATCTTTCACTGAGTGAGAAGACGTGGAGTAAATGTCCCATCTGTTACA
GTTCTGTGCATAAGAAGGATCTCAAGAGTGTGTTGCCACAGAGTCACATCAGTATGTTGTTGGTGATACCATTA
CGATGCAGCTGATGAAGAGGGAGAAAGGGGTGTTGGTGGCTTTGCCCAAATCCAAATGGATGAATGTAGACCATC
CCATTCACTAGGAGATGAACAGCACAGCCAGTACTCCAAGTTGCTGCTGGCCTCTAAGGAGCAGGTGCTGCACC
GGGTAGTTCTGGAGGAGAAAGTAGCACTAGAGCAGCAGCTGGCAGAGGAGAAGCACACTCCCGAGTCTGCTTTA
TTGAGGCAGCTATCCAGGAGCTCAAGACTCGGGAAGAGGCTCTGTGCGGATTGGCCGGAAGCAGAAGGGAGGTCA
CTGGTGTGTGGCTGCTCTGGAACAACCTGGTGTGATGGCTCCCTTGCGGAAGGAGTCTGTTTTTCAACCCAGGA
AGGGTGTGCTGGAGTATCTGTCTGCCTTCGATGAAGAAACACGGAAGTTTGTCTCTGGACACTCCTTCTAGAC
CTCTTGCTCTCCCTCTGGTAGAAGAGGAGGAAGCAGTGTCTGAACCAGAGCCTGAGGGGTTGCCAGAGGCCTGTG
ATGACTTGGAGTTAGCAGATGACAATCTTAAAGAGGGGACCATTGCACTGAGTCCAGCCAGCAGGAACCCATCA
CCAAGTCAGGCTTCACACGCCTCAGCAGCTCTCCTTGTTACTACTTTTACCAAGCGGAAGATGGACAGCATATGT
TCCTGCACCCCTGTGAATGTGCGCTGCCTCGTGCGGGAGTACGGCAGCCTGGAGAGGAGCCCCGAGAAGATCTCAG
CAACTGTGGTGGAGATTGCTGGCTACTCCATGTCTGAGGATGTTTCGACAGCGTCACAGATATCTCTCTCACTTGC
CACTCACCTGTGAGTTTCAAGCATCTGTGAACCTGGCTTTGCAACCTCCTGTGGTCTCTAAGGAAACCCCTAGAGATGT
TCTCAGATGACATTGAGAAGAGGAAACGTCAGCGCCAAAAGAAGGCTCGGGAGGAACGCCCGCAGAGCGCAGGA
TTGAGATAGAGGAGAACAAGAAACAGGGCAAGTACCCAGAAGTCCACATTCCCCTCGAGAATCTACAGCAGTTTC
CTGCCTTCAATTCTTATACCTGCTCCTCTGATTCTGCTTTGGGTCCCACCAGCACCGAGGGCCATGGGGCCCTCT
CCATTTCTCCTCTCAGCAGAAGTCCAGGTTCCCATGCAGACTTTCTGCTGACCCCTCTGTACCCCACTGCCAGTC
AGGGCAGTCCCTCATTCTGCGTTGGGAGTCTGGAAGAAGACTCTCCCTTCCCTTCCCTTTGCCAGATGCTGAGGG
TTGGAAGCAAGCAGATGTGTGGCCCAAACTGCTCCAAAGAAAGATGAGAACAGCTTAGTTCTCCTGCC
CTGTGGACAGCGACGGGGAGAGTGATAATTAGACCGTGTCTCTGTGCCAGTTTTCAAAATTCCTTCAGCCAAG
CTATTGAAGCAGCCTTCATGAACTGGACACACCAGCTACTTCAGATCCCCTCTCTGAAGAGAAAGGAGGAAAGA
AAAGAAAAAACAGAAACAGAAGCTCCTGTTTCAGCACCTCAGTCGTCCACACCAAGTGACACTACTGGCCAGGC
TACCTTCTCCATCTGGTTTTTGTGTTTTTGTGTTTTTCCCCCATGCTTTTGTGTTGGCTGTAAATTTTAAAGTA
TTTGAGTTTGAACAGATTAGCTCTGGGGGGAGGGGGTTTCCACAATGTGAGGGGGAACCAAGAAAATTTTAAATA
CAGTGTATTTTCCAGCTTCTGTCTTTACACCAAAATAAAGTATTGACACAAGAG

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FIGURE 3824

MMDGKNSSGSKRYNRKRELSYPKNESFNNQSRSSSQKSKTFNKMPPQRGGGSSKLFSSSFNGGRRDEVAEAQRA
EFSPAQFSGPKKINLNHLLNFTFEPRGQTGFEGSGHGSWGRNKGHKPFNKELFLQANCQFVVSEDQDYTAHF
ADPDTLVNWDVFVEQVRICSHVPSPCICLYPPTAAKITRCGHIFCWACILHYLSLSEKTWSKCPICYSSVHKDL
KSVVATESHQYVVGDTITMQLMKREKGVVALPKSKWMNVDPHPIHLGDEQHSQYSKLLLASKEQVLHRVVLEEKV
ALEQQLAEEKHTPESCFIEAAIQELKTREEALSGLAGSRREVTGVVAALEQLVLMAPLAKESVFQPRKGVLEYLS
AFDEETTEVCSLDTPSRPLALPLVEEEEAVSEPEPEGLPEACDDLELADDNLKEGTICTESSQQEPITKSGFTRL
SSSPCYFYQAEDGQHMFLHPVNVRLVREYGSLEERSPEKISATVVEIAGYSMSDVRQRHRYLSHLPLTCEFSI
CELALQPPVVSKEITLEMFSDDIEKRKRQRQKKAREERRRERRIEIEENKKQKYPEVHIPLLENLQQFPAFNSTC
SSDSALGPTSTEGHGALSISPLSRSPGSHADFLLTPLSPTASQGSPSFCVGSLEEDSPFP SFAQMLRVGKAKADV
WPKTAPKKDENSELVPPAPVDSGSDNSDRVPVPSFQNSFSQAIEAAFMKLDTPATSDPLSEEKGGKKRKKQKQK
LLFSTSVVHTK

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FIGURE 3825

GCCATGAACAGTGTGGGGGAGGCATGCACGGACATGAAGCGCGAGTACGACCAGTGCTTCAATCGCTGGTTCCGCC
GAGAAATTTCTCAAGGGGGACAGCTCCGGGGACCCGTGCACCGACCTCTTCAAGCGCTACCAGCAGTGTGTTTCAG
AAAGCAATAAAGGAGAAAGAGATTCCATTGAAGGACTGGAGTTCATGGGCCATGGCAAAGAAAAGCCTGAAAAT
TCTTCTTGACCTTGACAGTCACCTTGAAGGATTCGCAAGTCCAGAAATTGAGGACTCTGGATTTTTGTCAACTA
ACTCTGTGAACATAGCCATCAGATTTGATGAGGAAGTCTAGGAGAGAGGAGTTTTATTTCTCTCTTCGATGTTTTC
CTCTCAGTTGTAAAAGATGAACTCTTTGAGATGATTTCTCACCTGCTGTGGTATCTTGCAGGAAGTGTGTGCTAA
AATTGAACAATTTTTTTGAGATTATGGTTGCAATACTTGGCGTGGAATCAGCTTTACATAAATATACCTTGTATG
CAAACGATGATAAACTAGTCAGGATGAGCAGAGCTGCCGTGACCTCTTGATTTCTGCTGCAAAAGACATATACACT
GTACTGGGGTCACTATTTATGAAAGCAATTGGTTAGGACCTCTTTTTTTCTCTCAGGGAAGTAAATGCTCTGAAA
AGGGATCTGGGCACAACAGTTTCAGTGAGTGCTTTTGAGCACACTTTTATTTTTATATAGTAACTAATGGTTAAG
ATTGATGGTGGCCTGGATTAGCAAAGAGGAAGACAGCTTTTAACACAGTTCCCTGCCTTCACAAGAGGTGTCAGA
TTAAGATGTGAAAGCTGCAAGAATGTTGCAGTGAACACCATTTTCAGAGCTCTCAGTGTGCAGTTCAGGAATTAAG
ATACTTGGAATAGCTGTGGAGGAAGAACCTAAATTGCAAAGATCTGCTATTGCCAGCTCTCAACCCAAGTCAGTG
AATTGTCAACCTGCATATCCTAAAAATGTCAAAATGCTGCATCTGGTTAAATGTGGGGTAGGGGGGAAGCTGAA
GGTGCTCGCTTCATTTGCCTTGTTTACTCATCTGCCCTGTAATGTCTGTAATCCTGAAGATGGAATAAATTGTA
ACATTTAGTTTCTATCATT

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FIGURE 3826A

GGCATGGATGGTAGAGAGGGGAGCTGGCACTTGAAGTCAAGGCTCGACCTCAGAATGAGTGATCTTGTGTC
TCTGTGCCCCAGGACTGCATCCTCTACCAATACTTCACCAGCCTAGGGATCTGTGCTCCCAAGAGCCTGTTGAC
ATTGTAAACCTGAATCCAATCCATAAACCAGGCTTAGAATCACATTGTGGTGGAGCGGGTGTGGT
GGAGTCCCTGATTCAAATGTTTGACAAGGAAGCCTGACCATTGTCTTCTGTTGGGTGTTGGAGTCCAAGAGA
CCTGAGATCAGAGTCCAGCATTGTCATTTCATCCAGCCTTGGCAGTGTGGGATGTGACTCTGCCTCTGAACCGCA
GTTATACCATCTGTGCTGGTGGCGTTGTGAGGATGGCAGGTAACAAAGACGCCCTGCTGGCGGACTTGGAGTCTA
CCACCTCCACATCTCCAAACGGCCTGTGTTCTTGTGCGAGGAGACCCCTACTCATACCCAAGTGGAAACCACA
CATACCAGGAGATTGCCGTGCCACCCCCGTCACCCCCACCCCGTCCAGCGAGGCCCTCAATGGCACAATCCTTG
ACCCCTTAGACAGTGGCAGCCAGCAGCTCCCGATTTCATCCACCAGCAGCCTCAGTCTCATCAGTGTGTACG
GCTCCAGTGCCAAAACCTTCCAGTGTCTCCAACCTTCAGGACAGTGTGGCTCTCCGTGCTCCCGAGTGGGTGAGG
AGGAGCACGTCTACAGCTTCCCAACAAGCAGAAATCAGCTGAGCCTTCACCCACCGTAATGAGCACGTCCCTGG
GCAGCAACCTTTCTGAAGTTCGACCGCTGCTGCTGGAAGTGAACGCTGTACAGCATAACCCGCCAGGCTTCCCTG
CAGATGAGGCGCAACTCAAGCCCCCGCTTCTGAGGCGCTGAGCCCCCTCTATGGTGTCCAGAGACTAACAGCC
CCTTGGGAGGCAAGCTGGGCCCCGTGACGAAAGAGAAAGCCTAAGCGGAATGGGGGCGGGGCTGGAGGACGTGC
GGCCAGTGTGGAGAGTCTCTGGATGAAGTGGAGAGCTCCGTGCCAGCCCCGTCCCTGCCATCACTGTGAACC
AGGGCGAGATGAGCAGCCCGCAGCGCTCACCTCCACCCAACAGCAGACACGCATCTCGGCCTCCTCTGCCACCA
GGGAGCTGGACGAGCTGATGGCTTCGCTGTGCGATTTCAGGGGCTCCTGGCCCCCTGGAGGAGGTGTACTTCTTG
TCTCCATCAGCTCATCTGTCCAGGAGGGAGAAAAGTACCCCCATCCCTGTGCTGCCAGACACCGTACCCGAGCC
TCAGGAGTCTTGACAGCCCCCTCCGTGTCCACAGTTCATGGCCCAGGGGAAGACAGGGAGCAGCTACCCCCCTG
GGGGGCCCCGAAGCCCCGGGAGCCAGCTGGACAGCATGTGAGGAGCCTGCAGTCTGACCTGAACAAGCTGGGGG
TCGCCACAGTCGCCAAAGGAGTCTGCGGGGCTGCAAGAAGCCCATCGCCGGGCAGGTTGTGACCGCCATGGGGA
AGACGTGGCAGCCCCGAGCACTTCGTCTGCACCCACTGCCAGGAGGAGATCGGATCCCGGAATCTTCGAGCGGG
ATGGACAGCCCTACTGTGAAAAGGACTACCACAACCTCTTCTCCCCGCGTGTACTACTGCAACGGCCCCATCC
TGGATAAAGTGGTGACAGCCCTTGACCGGACGTGGCACCCTGAACACTTCTTCTGTGCACAGTGTGGAGCCTTCT
TTGGTCCCGAAGGGTTCCACGAGAAGGACGGCAAGGCCTACTGTGCAAGGACTACTTCGACATGTTGCGACCCA
AGTGTGGCGGCTGCGCCCGGGCCATCCTGGAGAACTATATCTCAGCCCTCAACACGCTGTGGCATCCTGAGTGT
TTGTGTGCCGGGAATGCTTCACGCCATTTCGTGAACGGCAGCTTCTTCGAGCAGACGGGCAGCCCTACTGTGAGG
TGCATAACACGAGCGGCGCGGCTCGCTGTGTTCTGGCTGCCAGAAGCCCATCACCGCCGCTGCATCACCGCCA
TGGCCAAGAAGTTCACCCCGAGCACTTCGTCTGTGCCTTCTGCCTCAAGCAGCTCAACAAGGACACCTTCAAGG
AGCAGAACGACAAGCCTTACTGTGCAAGTGTCTTCAAGCTCTTCTGCTAGGTGCCCTGCCCCCTGTCTCTGCC
CCCCCTCCCGAGCCAGCATCCCCAAGTGCAGCTGTGACACTTAGAGACTTACCCGGGGGTGAAGGGGTAAACCCGA
CTGAAACTGGAACCTTGTCTCCGTGGTGCAGGATGGACAGAGGGCGGTGAGGGGTCCCCCTGTCTGTCTTCA
CCCCTGCCAGAGCCTCTGGGCCCCCTCCTCCCTCCTGTAGCTCTCCCTAGGCTGCCACTCTCCATCCTCCCCAG
GGGTAGAGGCTGGGGGCTCCACCCAGCCCATGTACGTCCCCACGAAGTGGCCTGGCCAGCAGCCACACTGGAG
CCATCTCTTCTCATATTTTACAGAGTGCAGCCGGGGGGCAGGGAAGGGCAGGCAGGGTCTGTTGGGGTCTCTTT
TATCCTTATTCTCCCCGACCTAATTGTCTTTGTTCTGTGATTATTGGGGGACACCCGGCTCCCTCCAGACAAT
GCCAGCATAAATCCATCCATCCAAAGGCAGAGAACCAAGGGGCCATGGAAGGTTCTCTGTGCTCCTCCTACCCT
TCCAGTGCCTTAGGCCTGGCGACTGCCCTGCCCTTTTAGACCCGCCCTCCCTTTTATACCTGCTCTTGTCTAC
TGAGAAAAGCCTCTCCAGCAATAATGTTTTCTAGTCACTTCCCTCCGTCTCCGGGACGGCGTGCCTGGACACTGTA
CCGACTTTGATAGATTTCTACACTGAGGTTTGAATTCATATCGCCTGAGTTGCTTTTACTTCTCTATACAAAATG
ATTTTGAAGAGATTTTAAAGACGTTCCCTTTTGTATTCTCTTCTCATCCACCGCCACTGGGCTGTCACTGATG
GTGGCTCTGGTGTGAAGTTTGTCTTGTACTGAGGGTGGGGTGGGGAAGCAATTTGTATTTTATTGTTTCTTAGC
ACAAGCAGGTGAACTGGGAGCAGCTCTGTGACTCCCCCTCTTCACTTCATAGCTCACCAGGACTGTTTTATAAA
CTGCTGTATTTGGAACCCCTTCTTACTTCCCAGGCCAGCAAGCTCTTCACTGAACTGGTTGAAGGGTGTTC
ACCTTTTGGGCTAGAATTCTGAACCTTATCTGTTCTGTTTCTGTGGGAGGAGAAGGGGAAGTATGTTTGGGG
GGCTGCTTCTGTCTGAGTAAGCCCTCAGGAGCCTCTGCTCCCCGTGAACCCACTGAACCTTCTGAGCCCCAC
TGCTTCTATGGGGCTCTCTCTTCTGCTTCTCAGGAAAGCTGGTGTCTGATTTTGGCCATCAGGACTCTGACGTC
TCTTTGGTCTTGTGATTCTCTGAGGCAATCCCTTCCCCAGATCTGCTCCTCCCCCTTTCACAGGTGGGATCGG

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FIGURE 3826B

CACTCAGGGGGTCTGGAAAGAAGGTCATAAGGGAGCATGATAGGATTTGGGGCAGAGGGACAGGCTCCTCTGGGG
AAACCCCCCAGAGCTCTTTACCAAGGATGAAAGAGGAGCCAGGCCTTGGGCTCCTGATGAGGAGAAAGGGGCCCC
ACCGGGGTCTAATGGTGACAGTCCAAACCACTCCACTGGCCTCCTGGCAGAAGCCGAGTGTGCTGGGGTCTCCGA
AGAGGGTCCCTCCTTTTTGGGGGAAGGTCAGCCCAGCCCCTCCAAAGGTCTGATGTCTCCACTTTCACCCGCAGG
CCTTACCGCTCTGTTTATAGTGACCCACCCTAGATCTTCCCCAAGAGGGACTGGGGTTTCTGGGGTCCATTCTCT
GAGTCAGTGGTTATTTGAAAATTTGATTTTGATTTTATTTTTTCTCTGTAAACTTCCAAGCTGGCTTTTCCATT
TCAATTCCTGTGATTTATGCCAATAAAGTTTGCCCATG

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FIGURE 3827

CCTTCTCTCGCCAGGCGTCCTCGTGGAAGTGACATCGTCTTTAAACCCCTGCGTGGCAATCCCTGACGCACCGCCG
TGATGCCCAGGGAAGACAGGGCGACCTGGAAGTCCAACACTTCCCTTAAGATCATCCAACATATTGGATGATTATC
CGAAATGTTTCATTGTGGGAGCAGACAATGTGGGCTCCAAGCAGATGCAGCAGATCCGCATGTCCCTTCGCGGGA
AGGCTGTGGTGCTGATGGGCAAGAACACCATGATGCGCAAGGCCATCCGAGGGCACCTGGAAAACAACCCAGCTC
TGGAGAACTGCTGCCTCATATCCGGGGGAATGTGGGCTTTGTGTTACCAAGGAGGACCTCACTGAGATCAGGG
ACATGTTGCTGGCCAATAAGGTGCCAGCTGCTGCCCCGTGCTGGTGCCATTGCCCCATGTGAAGTCACTGTGCCAG
CCCAGAACACTGGTCTCGGGCCCCGAGAAGACCTCCTTTTTCCAGGCTTTAGGTATCACCCTAAAATCTCCAGGG
GCACCATTGAAATCCTGAGTGATGTGCAGCTGATCAAGACTGGAGACAAAGTGGGAGCCAGCGAAGCCACGCTGC
TGAACATGCTCAACATCTCCCCCTTCTCCTTTGGGCTGGTCATCCAGCAGGTGTTGACAATGGCAGCATCTACA
ACCCTGAAGTGCTTGATATCACAGAGGAACTCTGCATTCTCGCTTCCTGGAGGGTGTCCGCAATGTTGCCAGTG
TCTGTCTGCAGATTGGCTACCCAACGTGTGCATCAGTACCCATTCTATCATCAACGGGTACAAACGAGTCCTGG
CCTTGTCTGTGGAGACGGATTACACCTTCCCACCTTGCTGAAAAGGTCAAGGCCTTCTTGGCTGATCCATCTGCCT
TTGTGGCTGCTGCCCCCTGTGGCTGCTGCCACCACAGCTGCTCCTGCTGCTGCTGCAGCCCCAGCTAAGGTTGAAG
CCAAGGAAGAGTCGGAGGAGTCGGACGAGGATATGGGATTTGGTCTCTTTGACTAATCACCAAAAAGCAACCAAC
TTAGCCAGTTTTATTTGCAAAACAAGGAAATAAAGGCTTACTTCTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 3828

MPREDRATWKSNYFLKIIQLDDYPKCFIVGADNVGSKQMQQIRMSLRGKAVVLMGKNTMMRKAIRGHLENNPAL
EKLLPHIRGNVGFVFTKEDLTEIRDMLLANKVPAAARAGAIAPCEVTVPAQNTGLGPEKTSFFQALGITTGISRG
TIEILSDVQLIKTGDKVGASEATLLNMLNISPFSGGLVIQQVFDNGSIYNPEVLDITEETLHSRFLGVRNVASV
CLQIGYPTVASVPHSIINGYKRVLALSVETDYTEPLAEKVKAFLADPSAFVAAAPVAAATTAAPAAAAAPAKVEA
KEESESEDEDMGFGLFD

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FIGURE 3829

AGGCCCCGGGACCGCGGGATGGGTGTCGGCGTGACCAGGCCTGAGCTCCCTGTCTCTCCTCAGTGACATCGTCTTT
AAACCCTGCGTGGCAATCCCTGACGCACCGCCGTGATGCCAGGGAAGACAGGGCGACCTGGAAGTCCAACACTACT
TCCTTAAGATCATCCAACATATTGGATGATTATCCGAAATGTTTCATTGTGGGAGCAGACAATGTGGGCTCCAAGC
AGATGCAGCAGATCCGCATGTCCCTTCGCGGGAAGGCTGTGGTGCTGATGGGCAAGAACACCATGATGCGCAAGG
CCATCCGAGGGCACCTGGAAAACAACCCAGCTCTGGAGAACTGCTGCCTCATATCCGGGGGAATGTGGGCTTTG
TGTTACCAAGGAGGACCTCACTGAGATCAGGGACATGTTGCTGGCCAATAAGGTGCCAGCTGCTGCCCCTGCTG
GTGCCATTGCCCCATGTGAAGTCACTGTGCCAGCCCAGAACACTGGTCTCGGGCCCGAGAAGACCTCCTTTTTTCC
AGGCTTTAGGTATCACCCTAAAATCTCCAGGGGCACCATTGAAATCCTGAGTGATGTGCAGCTGATCAAGACTG
GAGACAAAGTGGGAGCCAGCGAAGCCACGCTGCTGAACATGCTCAACATCTCCCCCTTCTCCTTTGGGCTGGTCA
TCCAGCAGGTGTTTCGACAATGGCAGCATCTACAACCTGAAGTGCTTGATATCACAGAGGAAACTCTGCATTCTC
GCTTCCTGGAGGGTGTCCGCAATGTTGCCAGTGTCTGTCTGCAGATTGGCTACCCAACTGTTGCATCAGTACCCC
ATTCTATCATCAACGGGTACAAACGAGTCCCTGGCCTTGCTGTGTGGAGACGGATTACACCTTCCCACTTGCTGAAA
AGGTCAAGGCCTTCTTGGCTGATCCATCTGCCTTTGTGGCTGCTGCCCCCTGTGGCTGCTGCCACCACAGCTGCTC
CTGCTGCTGCTGCAGCCCCAGCTAAGGTTGAAGCCAAGGAAGAGTCGGAGGAGTCGGACGAGGATATGGGATTTG
GTCTCTTTGACTAAATCACCAAAAAGCAACCAACTTAGCCAGTTTTATTGTGCAAAACAAGGAAATAAAGGCTTACT
TCTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 3830

MPREDRATWKSNYFLKIIQLDDYPKCFIVGADNVGSKQMQQIRMSLRGKAVVLMGKNTMMRKAIRGHLENNPAL
EKLLPHIRGNVGFVFTKEDLTEIRDMLLANKVPAAARAGAIAPCEVTVPAQNTGLGPEKTSFFQALGITTGISRG
TIEILSDVQLIKTGDKVGASEATLLNMLNISPFSFGLVIQQVFDNGSIYNPEVLDIETEELHSRFLGVRNVASV
CLQIGYPTVASVPHSIINGYKRVLALSVETDYTEFPLAEKVKAFLADPSAFVAAAPVAAATTAAPAAAAAPAKVEA
KEESESEDEDMGFGLFD

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GGCACGAGGAAGCGGTTGGGAAAGTGTGCGTTTATCTTCGCGCCCTTTCGTTCTTTCGCGCGGCTTGCCTGGGCA
GGTAAAGCGCGATTGCGAGAGCTCGGCAACCTTGCCTGACTCAGCCGGAACCGGCTCCCGGCCCGAGGGGCGTGGT
GTCCTGGTGTCTCCGACTCCTTCCGAGGCTCCTTGGGACCGCGGTTCCGGGAGTCCCTTGCTCAGGGTCCCTTT
CCTGCAGTGAGGCGCCGTCCGCTTCCCTGTGTCCCGCAGACCCCATCATATGGGCAATACCAGCAGTGAGCGCG
CCGCGCTGGAGCGGCATGGTGGCCATAAGACGCCCCGGAGGGACAGCTCGGGGGGCACCAAGGACGGGGACAGGC
CCAAGATCCTGATGGACAGCCCCGAAGACGCCGACCTCTTCCACTCCGAGGAAATCAAGGCACCAGAGAAGGAGG
AATTCTTGGCCTGGCAGCATGATCTGGAAGTGAATGATAAAGCTCCCGCCAGGCTCGGCCAACGGTGTTCGAT
GGACGGGGGGCGGAAAGGAAGTTTACTTATCTGGGTCTTCAACAACCTGGAGTAACTTCCCTCACCAGAAGCC
ACAATAACTTTGTAGCCATCCTGGATCTGCCGGAAGGAGAGCATCAGTACAAGTTCTTTGTGGATGGTCAGTGGG
CGCAGGACCTTCCGAGCCCATAGTAACCAGCCAGCTTGGCACAGTTAACAACATCATTCAAGTGAAGAAAAGT
ACTTTGAAGTATTTGATGCTTTAATGGTGGATTCCCAAAGTGCTCCGATGTGTCTGAGCTGTCCAGTTCTCCCC
CAGGACCTTACCATCAGGAGCCCTACGTCTGCAAACCCGAAGAGCGCTTTCGGGCACCCCTATTCTCCCCCAC
ATCTCCTCCAGGTCATCCTGAACAAGGACACGGGGATTTCCTGTGATCCAGCTTTGCTTCTCTGAGCCCAATCAG
TCATGCTGAACCACCTATACGCGCTGTCTATCAAGGATGGAGTGATGGTGCTCAGCGCAACCCACCGGTACAAGA
AGAAGTACGTCAACCACCTTGTTATACAAGCCCATATTGAAGAGCTGGGGGCGGATGGTGGCCAGGAGACAGCACA
CCACCAGGCTCCACACGTGCATGCTTCCCAAGAGGGAATGGACTGTACATTGCTCATTTTACACTCTTTCAGAA
GACATTTTCATACCTGCCCTGGTCTGCTTGAAGGTTTGTCCAGGCAGAGCAGCTCCTGCAGCGCCTCGGTCTGTG
ACAGTCTCTTAGCACCCCATAGGCTTTGAGCCTCGGGGACTCATCAAGTCCAAGAAAAGAGGGAGGGGTGGCAG
AGGATCTGCAGCCCTGGCCCCGCGGTGCATGAGGCTGGGTGCAGTTCTAAACCTACATTCTCGATTTTTCTTAAG
CCAAAAATGAATGCTAACTCCTTTGCCAGTAAAATTCTGGGAAACAGGGACTGAGGCCACACATCATTTCAGTC
ATCTGTGTGTTTTTAAGGCCAGCCACTTGTCCCTGTTGAGGCCTGGCTATGGAACATAATACAGTGTTGGTCTTG
CCTGTCCCTTCAAAATCAACAACAGATTGTCTCTCGGCTCCAGGGAGGTGTCATTTCTATAGAAATTAGAAGCTTT
CTGATTTCTAGATGAGGTTTTTACAATTGTTTCTTACAGTCATGTGCACATAAGTACTCTTTTTGTAAAGCAGAGGTG
GCTGGCTCTGCAGCCTTAAGGCCATTTTTTAAGTCACCACGCTTAGAAGTCACATGAACTCTGCTCAGCAATAAT
CTGTTCTCAGAACAGACTTTTCAACCTGCTGCCGGATTTCCTCATTGAGCTGGATGATCCTCAGGACTGACCAGT
TAGCTGGCAGGTTGTCCAGCTTTTTATTCCAGTCATAATAGGTGACAGTGTTAACCGTGAAAACCTTGAGAGGCAC
TCTGCCCTCTTCCCTATAAAATCACACAGCGTGATTTTACAAGGTCCCGTGGCACCTTGCTCAGGACCTCTGCC
CTAGTTAGCAAGACTGCAGCAGTTGCTGTTGCTTATTCTGAAAGGAATGTAGAACTTGACAGCAGCCTTCTGAGT
CTGGGTACAGGAAGATGTCCTTTGGACCAAAGCAGACTTCTGTATACGAGCTCAGTTTCCCGGGAGTCGCCACAG
ATGATACCACTAGCCCAGGTTGCTGTGAGTCAGCGGAAGCTCCCGTTATGCCCTTGTCTCCTGGTGGGAGAGGGA
GGAGTGAGCTCCTTGGTTCAGTATTTTACTTGTGATACCTGAGTTTGGGGGTACCCCTTTTTTGTGACTTTTCAA
AACAGTGAATTACTGTACCTTGATGGACAAGTTTCAATAAAACTTTGTAAAAA
AA

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FIGURE 3832

MGNTSSERAALERHGGHKTPRRDSSGGTKDGRPKIIMDSPEDADLFHSEEIKAPEKEEFLAWQHDLEVNDKAPA
QARPTVFRWTGGGKEVYLSGSFNNWSKLPLTRSHNNFVAILDLPEGEHQYKFFVDGQWTHDPSEPIVTSQLGTVN
NIIQVKKTD FEVFDALMVDSQKCS DVSELSSPPGPYHQEPYVCKPEERFRAPPILPPHLLQVILNKDTGISCDP
ALLPEPNHVMLNHLIALSIKDGMVLSATHRYKKKYVTLLLYKPI

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FIGURE 3833

GTTCCGGGAGTCCCTTGCTCAGGGTCCCTTTCCTGCAGTGAGGCGCCGTCCGCCTTCCCTGTGTCCCCGCAGACC
CCCATCATGGGCAATACCAGCAGTGAGCGCGCCGCGCTGGAGCGGCATGGTGGCCATAAGACGCCCCGGAGGGAC
AGCTCGGGGGGCACCAAGGACGGGGACAGGCCCAAGATCCTGATGGACAGCCCCGAAGACGCCGACCTCTTCCAC
TCCGAGGAAATCAAGGCACCAGAGAAGGAGGAATTCCTGGCCTGGCAGCATGATCTGGAAGTGAATGATAAAGCT
CCCGCCAGGCTCGGCCAACGGTGTTTCGATGGACGGGGGGCGGAAAGGAAGTTTACTTATCTGGGTCTTCAAC
AACTGGAGTAAACTTCCCCTCACCAGAAGCCACAATAACTTTGTAGCCATCCTGGATCTGCCGGAAGGAGAGCAT
CAGTACAAGTTCTTTGTGGATGGTCAGTGGACGCACGACCCCTCCGAGCCCATAGTAACCAGCCAGCTTGGCACA
GTTAACAACATCATTCAAGTGAAGAAAAGTACTTTGAAGTATTTGATGCTTTAATGGTGGATTCCCAAAGTGC
TCCGATGTGTCTGAGCTGTCCAGTTCTCCCCCAGGACCCCTACCATCAGGAGCCCTACGTCTGCAAACCCGAAGAG
CGCTTTCGGGCACCCCTATTCTCCCCCACATCTCCTCCAGGTCATCCTGAACAAGGACACGGGGATTTCTGT
GATCCAGCTTTGCTTCTGAGCCCAATCACGTGATGCTGAACCACCTATACGCGCTGTCTATCAAGGATGGAGTG
ATGGTGCTCAGCGCAACCCACCGGTACAAGAAGAAGTACGTACCCACCTTGTTATACAAGCCCATATGAAGAGCT
GGGGGCGGATGGTGGCC

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FIGURE 3834

ATGGCCAGCGTCCACGAGAGCCTCTACTTCAATCCCATGATGACCAATGGGGTTGTGCACGCCAATGTGTTCCGGC
ATCAAGGACTGGGTGACGCCGTACAAGATCGCGGTGCTGGTGCTGCTGAACGAGATGAGCCGCACAGGCGAGGGC
GCCGTCAGCCTCATGGA⁵GCGGCGGAGGGCTCAACCAGCTGCTCCTGCCCCCTGCTGCAGGGCCCAGATATTACACTG
TCAAACTTTTACAAGTTAATTGAAGAGTCTTGTCACAGCTGGCAAATTCAGTGCAGATCAGAATCAAAC¹⁰TGATG
GCTGAAGGCGAGTTGAAGGATATGGAACAGTTTTTTTGATGACCTTTT¹⁵CAGATTCTTTCTCTGGA¹⁵ACTGAACCAGAG
GTTCA²⁰AAAACAAGTGTAGTAGGTTTGT²⁵TTCTGCGTCACATGATCTTGGCCTACAGTAAGCTTTCTTT³⁰CAGCCAA
GTGTTTAA³⁵ACTGTACACTGCCCTTCAGCAGTACTTCCAGAATGGTGAGAAAAAGACAGTGGAGGATGCTGATATG
GAACTGACCAGTAGAGATGAGGGTGAAAAGAAAAATGGA⁴⁰AAAAAGAAGAACTTGATGTATCTGTAAGAGAAGAGGAG
GTATCTTG⁴⁵CAGTGGGCCTCTGTCCCA⁵⁰AAAAACAAGCAGAATTTTTTCTTTCTCAACAGGCTTCTTTGCTAAAGAAT
GATGAGACTAAGGCCCTCACTCCAGCTTCCTTGCAGAAGGAATTAACAATTTGTTGAAATTTAATCCTGATTTT
GCTGAAGCGCATTATCTCAGCTACTTAAACAACCTCCGTGTCCAAGATGTTTT⁵⁵CAGTTCAACACACAGTCTCCTC
CATTATTTTGATCGTCTGATTCTTACCGGAGCCGAAAGCAAAGTAATGGGGAAGAGGGCTATGGCCGGAGCTTG
AGATACGCCGCTCTGAATCTTGCCGCCCTGCACTGCCGCTTCGGTCACTATCAACAGGCAGAGCTCGCCCTGCAG
GAGGCAATTAGGATTGCCCAGGAGTCCAACGATCACGTGTGTCTCCAGCACTGTTTGAGCTGGCTTTATGTGCTG
GGGAGAAGAGATCCGATAGCTATGTTCTGCTGGAGCATTCTGTGAAGAAGGCAGTACATTTTGGGTTACCGTAC
CTCGCCTCCCTGGGAATACAGTCCCTTGTTCAACAGAGAGCTTTTGCTGGGAAGACGGCAAACAAGCTGATGGAT
GCCCTAAAGGACTCCGACCTCCTGCACTGGAAACACAGCCTGT⁶⁰CAGAGCTCATCGATATCAGCATCGCACAGAAA
ACGGCCATCTGGAGGCTGTATGGCCGCAGCACCATGGCACTGCAACAGGCCCAGATGTTGCTGAGCATGAACAGC
CTGGAGGCGGTGAATGCGGGCGTGCAGCAGAACACAGAGTCCTTTGCTGTGCACTCTGCCACCTCGCAGAG
CTACACGCGGAGCAGGGCTGTTTTGCTGCAGCTTCTGAAGTGTTAAAGCACTTGAAGGAACGATTTCCGCCTAAT
AGTCAGCACGCCCAGTTATGGATGCTATGTGATCAAAAAATACAGTTTGACAGAGCAATGAATGATGGCAAATAT
CATTTGGCTGATTCACTTGTTACAGGAATCACAGCTCTCAATAGCATAGAGGGTGT⁶⁵TTATAGGTAAG

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FIGURE 3835

GCCTGGGACTGTGTCTGTCTGCGCCATGGCCGCCGCGCTGCTCGCCCGGGCCTCGGGCCCTGCCCCGAGAGCTCTCT
GTCCTAGGGCCTGGCGGCAGTTACACACCATCTACCAGTCTGTGGAACCTGCCCCGAGACACACCAGATGTTGCTCC
AGACATGCCGGGACTTTGCCGAGAAGGAGTTGTTTCCCATTTGCAGCCAGGTGGATAAAGGAACATCTCTTCCCAG
CGGCTCAGGTGAAGAAGATGGGCGGGCTTGGGCTTCTGGCCATGGACGTGCCCCGAGGAGCTTGGCGGTGCTGGCC
TCGATTACCTGGCCTACGCCATCGCCATGGAGGAGATCAGCCGCGGCTGCGCCTCCACCGGAGTCATCATGAGTG
TCAACAACCTCTCTCTACCTGGGGCCCATCTTGAAGTTTGGCTCCAAGGAGCAGAAGCAGGCGTGGGTACGCCTT
TCACCAGTGGTGACAAAATTGGCTGCTTTGCCCTCAGCGAACCCAGGGAACGGCAGTGATGCAGGAGCTGCGTCCA
CCACCGCCCCGGGCGGAGGGCGACTCATGGGTCTGAATGGAACCAAAGCCTGGATCACCAATGCCTGGGAGGCTT
CGGCTGCCGTGGTCTTTGCCAGCACGGACAGAGCCCTGCAAAACAAGGGCATCAGTGCCTTCTTGGTCCCCATGC
CAACGCTGGGCTCACGTTGGGGAAGAAAGAAGACAAGCTGGGCATCCGGGGCTCATCCACGGCCAACCTCATCT
TTGAGGACTGTCGCATCCCCAAGGACAGCATCTGGGGGAGCCAGGGATGGGCTTCAAGATAGCCATGCAAACCC
TGGACATGGGCCGCATCGGCATCGCCTCCCAGGCCCTGGGCATTGCCAGACCGCCCTCGATTGTGCTGTGAACT
ACGCTGAGAAATCGCATGGCCTTCGGGGCGCCCCCTACCAAGCTCCAGGTCATCCAGTTCAAGTTGGCAGACATGG
CCCTGGCCCTGGAGAGTGCCCGGCTGCTGACCTGGCGTGCTGCCATGCTGAAGGATAACAAGAAGCCTTTCATCA
AGGAGGCAGCCATGGCCAAGCTGGCCGCTCGGAGGCCGCGACCGCCATCAGCCACCAGGCCATCCAGATCCTGG
GCGGCATGGGCTACGTGACAGAGATGCCGGCAGAGCGGCACTACCGCGACGCGCCGCATCACTGAGATCTACGAGG
GCACCAGCGAAATCCAGCGGCTGGTGATCGCCGGGCATCTGCTCAGGAGCTACCGGAGCTGAGCCCGCGGCGGAC
TGCCCCAGGACTGCGGGAAGGCGGGGAGCCAGGGGCCTCCACCCCAACCCCGGCTCAGAGACTGGGCGGCCCGG
CGGGGGCTCCCTGGGGACCCAGATGGGCTCAGTGCTGCCACCCAGATCAGATCACATGGGAATGAGGCCCTCCG
ACCATTGGCAGCTCCGCCTCTGGGCCTTTCGCGCTCCTCACCAGTGTGCTCAAGTTCTCTCATCTAAGTGGCCCT
GGCCTCCTGGAGGCGGGGTTGTGGGGGGGCTGAGCGACACTCAGGGACACCTCAGTTGTCTTCCGCGGGGCCCTG
GTGCCCTGGCATGAAGGCCAGTGCGACAGGCCCTTGGTGGGGTCTGTCTTTTCTTGGAGTCAAGGTCAGAGTCAAGG
CAGGGCTGGGGTCAGGATGACGAGGCCCTGGGGTCTGGTGTGGGCAGGTGGTGGGGCTGGGCCATGGAGCTGGC
CCAGAGGCCCTCAGCCCTTTGTAAAGTCTGATGAAAGCAGGGGTGGTGATTGCTGTGTGACTGACTGTGGG
TAATAAACACACCTGTCCCCC

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FIGURE 3836

GTTCCCTGAGGTGGGAGGCGGTACCCGTGGCTGAGAAGAAGGAGGCCTGAGAGCGACATGTCCCCGGCGGGCTCAGG
CGGAGCGGCCCGTGCGCTGTTTTCTGAGTCCGGGGTGCCCTGGCAGCCGGCCGAGGACGAGGGTCGGCGGGGG
CTGCCCCCGTGCTGGTGGCCGCCATGCTGGGAGCCTGGGCGGTTGAGGGAACCGCTGTGGCGCTCCTGCGACTGC
TGCTGCTGCTGCTGCCGCCGGCGATCCGGGGACCCGGGCTCGGCGTGGCCGGCGTGGCCGGCGCGGGCGGGGGCCG
GGCTGCCCGAGAGCGTCATTTGGGCGGTCAACGCGGGTGAGAGGCGCATGTGGACGTGCACGGGATCCACTTCC
GCAAGGACCCTTTGGAAGGCCGGGTGGGCGGAGCCTCAGACTATGGCATGAAACTGCCAATCCTGCGTTCCAACC
CTGAGGACCAGATCCTGTATCAAACCTGAGCGGTACAATGAGGAGACCTTTGGCTACGAAGTGCCCATCAAAGAGG
AGGGGGACTACGTGCTGGTCTTTGAAATTTGCAGAGGTCTACTTTGCACAGTCCCAGCAAAAGGTATTTGATGTAC
GATTGAATGGCCACGTGCTGGTGAAGGACTTGGAATATCTTTGATCGTGTTGGGCATAGCACAGCTCACGATGAAA
TTATACCTATGAGCATCAGAAAGGGGAAGCTGAGTGTCCAGGGGGAGGTGTCCACCTTCACAGGGAAACTCTACA
TTGAGTTTGTCAAGGGGTACTATGACAATCCCAAGGTCTGTGCACTCTACATCATGGCTGGGACAGTGGATGATG
TACCAAAATCTTCATTCCAACCCTCTTCTGCCTCTGCCGGTTGTGAGAACAAATGACTATCCTGAACAGGGTGGAG
GGGTGTGGGAAAGAAACCAGCCATATTGGTTTTGGTTTTCTGTATTTTTTACAATGATTAATGAACAAAAACAAG
AGAAAAAAACACACATCAATTAAAGGAGACAAAAGAG

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FIGURE 3837

GGCACGAGGCATGGGCGGAGCCGTAGTTACGGTCGACTGGGGCGTCGTCCCTAGCCCCGGGAGCCGGGTCTCTGGA
GTCGCGGCCCGGGGTTACCGATGTCGACGAGGAAGCGAGGCAGAGCGGAGGCTCCTCGCAGGCCGGCGTCGTGA
CTGTCAGCGACGTCCAGGAGCTGATGCGGCGCAAGGAGGAGATAGAAGCGCAGATCAAGGCCAACTATGACGTGC
TGGAAAGCCAAAAAGGCATTGGGATGAACGAGCCGCTGGTGGACTGTGAGGGCTACCCCCGGTCAGACGTGGACC
TGTACCAAGTCCGCACCGCCAGGCACAACATCATATGCCTGCAGAATGATCACAAGGCAGTGATGAAGCAGGTGG
AGGAGGCCCTGCACCAGCTGCACGCTCGCGACAAGGAGAAGCAGGCCCGGGACATGGCTGAGGCCACAAAGAGG
CCATGAGCCGCAAACTGGGTGAGAGTGAGAGCCAGGGCCCTCCACGGGCCCTTCGCCAAAGTGAACAGCATCAGCC
CCGGCTCCCCAGCCAGCATCGCGGGTCTGCAAGTGGATGATGAGATTGTGGAGTTCGGCTCTGTGAACACCCAGA
ACTTCCAGTCACTGCATAACATTGGCAGTGTGGTGCAGCACAGTGAGGGGAAGCCCTGAATGTGACAGTGATCC
GCAGGGGGGAAAAACACCAGCTTAGACTTGTTCACACGCTGGGCAGGAAAAGGACTGCTGGGCTGCAACATTA
TTCCTCTGCAAAGATGATTGTCCCTGGGGAACAGTAACAGGAAAGCATCTTCCCTTGCCCTGGACTTGGGTCTAG
GGATTTCAACTTGTCTTCTCTCCCTGAAGCATAAGGATCTGGAAGAGGCTTGTAACCTGAACTTCTGTGTGGTG
GCAGTACTGTGGCCACCAAGTGAATCTCCCTGGATTAAGGCATTCTTAAAACTTAGGCTTGGCCTCTTTCACA
AATTAGGCCACGGCCCTAAATAGGAATTCCCTGGATTGTGGGCAAGTGGGCGGAAGTTATTCTGGCAGGTACTGG
TGTGATTATTATTATTATTTTAATAAAGAGTTTTACAGTGCTGATATGACCCTGTTGTACCCCCAGCTGAATTT
CTTATGACCCTCCCAAACCAAAGCTCAGATGGGGTCAGAAGAGCTTCATAGAAAGTTGGGCAAAACAGGCTAGCA
ATTGCAAAGTCAGGCTTTGACCAACATATTTCTTTGCACTGAGGCCTTGCTGCTGTGGATACGGAAATGGTTAAG
TACTGTGCTTCCTCAGCAGCTGGGCTGTCAGGGCCATAGTAGCTCCCTTTGGAGAACAGGGAAAGCCTGGAGGCT
TCCAGGTGGCCCAGCGTGGTGTCTGTGCTTCTCTTTAGGAACCCACCAGAGGGCAGCAAGCTCCTTTTAC
TTCGCTAGTAAGAACCCCTCCGTTTTTGTGTGTTTTTGTTTTTGTTTTCTGGAGACAAGGTCTTGCTTTGTACCC
CAGGCTGGAGTGCAGTGTCTGTGATCAAGGTTCACTGAAGCCTTGACGCTGTGGGCCTGCTCAGCCGCCCAAGT
ATCTGGGACCACAGGCGTGCAACCATGCATAGCTAATTTATTTTTTGTAGAGACAGGGTCTCCCTGTGTGAC
CAGGTTSGTCTCGAACTCCTGGGCTCAAGCAGTCCCTGCCTTGGCCTCCTAAAGTGCTGGGATCACAGGCGTG
AGCCACTGCGCCCAGCCCACTGCTAGTTTGACTTTTTATAATTGAACCTCCTGGCTATGCCCTGAGATCAGCGCT
ATTTTGTAAACCGCTGAGGTATGGATAGGAACGAGTAGATCAGACCTCTTGAAAATGCTTATTCTTCCCTCCCTT
TATTTTTTGTCTCTTTAAGATGGTAAATGGTTCTCAGGGATTCTGCCAATACTTTGAATTATTTTTTCTCT
CCATGGTATCAGTGTTCATTTCCCAAGTCTTGCACACCGCTTTCTGTTTTGGCAGTTCTGCCAGGCAAGCCCTG
TGTTCTTTGGGACTGGTTTTGCTGTGGTTGGATACAGATACCAGCTTGCTTGATGGGATTGGTATTGCTGTGTG
CTTCCAGCCACAGGTTCTCACACTCAATTCCAAAGCCTTCTATTGGGCGAATCCCTCAAACCTCTATTGACCT
GACAGCCATACGTATTTCCCTCTGGTAGCCACAGACATGCTGTGTTTTACCAATGTTTGCTGTTTAAATTGCATGT
TCTAATTCCACGTATTTCCAGTCTCTTTTATAAAGTCTCAGACTATAATAAACACAGCTTGCCCAGTTAAAAAA
AAAAAAAAAAAAA

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FIGURE 3838

MSDEEARQSGGSSQAGVVTVSDVQELMRRKEEIEAQIKANYDVLESQKGIGMNEPLVDCEGYPRSDVDLYQVRTA
RHNIICLQNDHKAVMKQVEEALHQLHARDKEKQARDMAEAHKEAMSRKLGQSESQGPPRAFAKVNSISPGSPASI
AGLQVDDEIVEFGSVNTQNFQSLHNIGSVVQHSEGKPLNVTVIRRGKHLRLVPTRWAGKLLGCNI IPLQR

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FIGURE 3839

GTGCGTCTGGCGTCCGCGCGCTGCACAATGGCGGCTCTGAAGAGTTGGCTGTCGCGCAGCGTAACTTCATTCTTC
AGGTACAGACAGTGTGTTGTGTGTTCTGTTGTGGCTAACTTTAAGAAGCGGTGTTCTCAGAATTGATAAGACCA
TGGCACAAAACGTGTGACGATTGGCTTTGGAGTAACCCTGTGTGCGGTTCTTATTGCACAGAAATCAGAGCCTCAT
TCCCTTAGTAGTGAAGCATTGATGAGGAGAGCAGTGTCTTTGGTAACAGATAGCACCTCTACCTTTCTCTCTCAG
ACCACATATGCGTTGATTGAAGCTATTACTGAATATACTAAGGCTGTTTATAACCTTAACTTCTCTTTACCGACAA
TATACAAGTTTACTTGGGAAAATGAATTCAGAGGAGGAAGATGAAGTGTGGCAGGTGATCATAGGAGCCAGAGCT
GAGATGACTTCAAAACACCAAGAGTACTTGAAGCTGGAAACCACTTGGATGACTGCAGTTGGTCTTTTCAGAGATG
GCAGCAGAAGCTGCATATCAAACCTGGCGCAGATCAGGCCTCTATAACCGCCAGGAATCACATTCAGCTGGTGAAA
CTGCAGGTGGAAGAGGTGCACCAGCTCTCCCGGAAAGCAGAAACCAAGCTGGCAGAAGCACAGATAGAAGAGCTC
CGTCAGAAAACACAGGAGGAAGGGGAGGAGCGGGCTGAGTCGGAGCAGGAGGCCTACCTGCGTGAGGATTGAGGG
CCTGAGCACACTGCCCTGTCTCCCCACTCAGTGGGGAAAGCAGGGGCAGATGCCACCCTGCCAGGGTTGGCATG
ACTGTCTGTGCACCGAGAAGAGGCGGCAGATCCTGCCCTGGCCAATCAGGCGAGACGCCTTTGTGAGCTGTGAGT
GCCTCCTGTGGTCTCAGGCTTGGCTGGACCTGGTTCTTAGCCCTTGGGCACTGCACCCTGTTTAACATTTTACC
CCACTCTGTACAGCTGCTCTTACCCATTTTTTTTACCTCACACCCAAAGCATTTTGCCTACCTGGGTCAGAGAGA
GGAGTCCTTTTTGTGATGCCCTTAAGTTCAGCAACTGTTTAACCTGTTTTTTCAGTCTTATTTACGTCGTCAAAAAT
GATTTAGTACTTGTTCCTCTGTTGGGATGCCAGTTGTGGCAGGGGGAGGGGAACCTGTCCAGTTTGTACGATTT
CTTGTATGTATTTCTGATGTGTTCTCTGATCTGCCCCCACTGTCTGTGAGGACAGCTGAGGCCAAGGAGTGAA
AAACCTATTACTACTAAGAGAAGGGGTGCAGAGTGTTTACCTGGTGCTCTCAACAGGACTTAACATCAACAGGAC
TTAACACAGGCCTCTTGTTCCTTCCTTTCTTTCCGTTTCTCTATTGTATCCAAAGGAGAAGAGTGTAAGATTTTG
TTTGCATCTGAAAGAGAAAATGCGTCTCTCCTGG

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FIGURE 3840

MAALKSWLSRSVTSFFRYRQCLCVPVVANFKKRCFSELIRPWHKTVTIGFGVTLCVPIAQKSEPHSLSSSEALMR
RAVSLVTDSTSTFLSQTTYALIEAITEYTKAVYTLTSLYRQYTSLLGKMNSEEEDEVWQVIIGARAEMTSKHQEY
LKLETTWMTAVGLSEMAAEAAAYQTGADQASITARNHIQLVKLQVEEVHQLSRKAETKLAEAQIEELRQKTQEAGE
ERAESEQEAYLRED

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FIGURE 3841A

GTGAGTCGCGCGGACGGAGCCGGACAAAAGCGGGCGGCGGCGGCGGAGGATGAACAGCATCAAGAACGTGCCGGCGC
GGGTGCTGAGCCGAGGCCGGGCCACAGCCTGGAGGCCGAGCGGAGCAGTTTCGACAAGACCCAGGCCATCAGCA
TCAGCAAAGCCATCAACACCCAGGAGGCCCGCTGAAGGAGAAGCACGCCCGGCGCATCATTTCTGGGCACACACC
ACGAGAAGGGGGCTTTACCTTCTGGTCTACGCCATTGGGCTGCCGCTGCCAGCAGCTCCATTCTCAGCTGGA
AGTTCTGCCACGTCTCCACAAGGTCCTTCGAGACGGGCACCCCAATGTGCTGCATGACTGCCAGCGGTACCGCA
GCAACATCCGGGAGATTGGAGACCTGTGGGGACATTTGCATGACCGCTACGGACAGCTGGTGAATGTCTACACCA
AGCTGCTGCTGACCAAGATCTCCTTCCACCTCAAGCATCCCCAGTTTCCCGCGGGCCTGGAGGTGACAGATGAGG
TACTGGAGAAGGCAGCTGGGACCGATGTCAACAACATCTTCCAGCTCACTGTGGAGATGTTTGATTACATGGATT
GTGAGCTGAAGCTTTCTGAATCAGTTTTCCGACAGCTCAACACGGCCATCGCCGTATCCCAGATGTCCTCAGGCC
AGTGCCGCTGGCCCCCTCATCCAGGTCACTCAGGACTGCAGCCACCTCTACCACTACACGGTCAAGCTCCTGT
TCAAGCTACACTCTTGTCTCCCTGCGGACACCTTGAAGGCCACAGGGACCGGTTCCACGAGCAGTTTACAGCC
TCAGGAACCTTCTCCGAGAGCCTCCGACATGCTGTACTTCAAGCGGCTCATCCAGATCCCCCGGCTGCCCGAGG
GACCCCTAACTTCTGCGGGCCTCAGCCCTGGCTGAGCACATCAAGCCGGTGGTGGTGATCCCCGAGGAGGCC
CGGAAGATGAGGAGCCGGAGAATCTCATTGAGATCAGCACAGGGCCCCCGCGGGGGAGCCAGTGGTGGTGGCTG
ACCTCTTCGATCAGACGTTTGGACCCCCCAATGGGCTCTGTGAAGGACGACAGGGACCTCCAGATTGAGAGCTTGA
AGAGAGAGGTGGAATGCTCCGCTCTGAAGCTGAGAGAGATCAAGCTGGAGGCCAGCGGTACATCGCGCAGCTGA
AGAGCCAGGTGAATGAGCTGGAGGTGAGCTGGAGGAGCAGCGGAAGCAGAAGCAGAAGGCCCTGGTGGATAATG
AGCAGCTCCGCGACGAGCTGGCCAGCTGAGGGCTGCCAGCTGGAGGGCGAGCGGAGCCAGGGCCTGCGTGAGG
AGGCTGAGAGGAAGGCCAGTGCCACGGAGGCGGCTACAACAAGCTGAAGGAAAAGCACAGTGAGCTCGTCCATG
TGCACGCGGAGCTGCTCAGAAAGAACGCGGACACAGCCAAGCAGCTGACGGTGACGCAGCAAAGCCAGGAGGAGG
TGGCGCGGGTGAAGGAGCAGCTGGCCTTCCAGGTGGAGCAGGTGAAGCGGGAGTCGGAGTTGAAGCTAGAGGAGA
AGAGCGACCAGCTGGAGAAGCTCAAGAGGGAGCTGGAGGCCAAGGCCGAGAGCTGGCCCGCGCGCAGGAGGCC
TGAGCCACACAGAGCAGAGCAAGTCGGAGCTGAGCTCACGGCTGGACACGCTGAGTGCGGAGAAGGATGCTCTGA
GTGGAGCTGTGCGGCAGCGGGAGGCAGACCTGCTGGCGGCGCAGAGCCTGGTGCAGCAGAGGGCGGCGCTGA
GCCGGGAGCAGCAGCGCAGCTCCCAGGAGCAGGGCGAGTTGACGGGCCGGCTGGCAGAGAGGGAGTCTCAGGAGC
AGGGGCTGCGGCAGAGGCTGCTGGACGAGCAGTTGCGAGTGTGCGGGGCGCTGCTGCCGAGGCGCGGGCATCC
TGCAGGATGCCGTGAGCAAGCTGGACGACCCCTGCACCTGCGCTGTACCAGCTCCCCAGACTACCTGGTGAGCA
GGGCCAGGAGGCCCTTGGATGCCGTGAGCACCTGGAGGAGGGCCACGCCAGTACCTGACCTCCTTGGCAGACG
CCTCCGCCCTGGTGGCAGCTCTGACCCGCTTCTCCACCTGGCTGCGGATACCATCATCAATGGCGGTGCCACCT
CGCACCTGGCTCCACCGACCTGCCGACCGCCTCATAGACACCTGCAGGGAGTGCGGGGGCCGGGCTCTGGAGC
TCATGGGGCAGCTGCAGGACCAGCAGGCTCTGCGGCACATGCAGGCCAGCCTGGTGCAGACACCCCTGCAGGGCA
TCCTTCAGCTGGGCCAGGAAGTGAACCCCAAGAGCCTAGATGTGCGGCAGGAGGAGCTGGGGGCGGTGGTTCGACA
AGGAGATGGCGGCCACATCCGAGCCATTGAAGATGCTGTGCGGAGGATTGAGGACATGATGAACCAGGCACGCC
ACGCCAGCTCGGGGGTGAAGCTGGAGGTGAACGAGAGGATCCTCAACTCCTGCACAGACCTGATGAAGGCTATCC
GGCTCCTGGTGACGACATCCACTAGCCTGCAGAAGGAGATCGTGGAGAGCGGCAGGGGGGAGCCACGCAGCAGG
AATTTTACGCCAAGAACTCGCGCTGGACCGAAGGCCTCATCTCGGCCTCAAGGCTGTGGGCTGGGGAGCCACAC
AGCTGGTGGAGGCAGCTGACAAGGTGGTGCTTCACACGGGCAAGTATGAGGAGCTCATCGTCTGCTCCCACGAGA
TCGCAGCCAGCAGCGGCCAGCTGGTGGCGGCCCTCAAGGTGAAGGCCAACAAGCACAGCCCCACCTGAGCCGCC
TGCAGGAATGTTCTCGCACAGTCAATGAGAGGGCTGCCAATGTGGTGGCCTCCACCAAGTCAGGCCAGGAGCAGA
TTGAGGACAGAGACACCATGGATTTCTCCGGCCTGTCCCTCATCAAGCTGAAGAAGCAGGAGATGGAGACCCAGG
TGGTGTCTGGAGCTGGAGAAGACGCTGGAGGCTGAACGCATGCGGCTGGGGGAGTTGCGGAAGCAACACTACG
TGCTGGCTGGGGCATCAGGCAGCCCTGGAGAGGAGGTGGCCATCCGGCCCAGCACTGCCCCCGAAGTGTAACCA
CCAAGAAACCACCCCTGGCCAGAAAGCCAGCGTGGCCCCCAGACAGGACCACAGCTTGACAAAAGGATGGCA
TCTACCCAGCTCAACTCGTGAAGTACTAGGCCCCCAGGGGTCCAGCAGGGTGGCTGGTGACAGGCCTGGGCCTC
TGCAACTGCCCTGACAGGACCGAGAGGCCTTGCCCTCCACCTGGTGGCCAAGCCTCCCGCCCCACCGTCTGGAT
CAATGTCCTCAAGGCCCCCTGGCCCTTACTGAGCCTGCAGGGTCTGGGCCATGTGGGTGGTGTCTTGGATGTGA
GTCTCTTATTTATCTGCAGAAGGAACCTTTGGGGTGCAGCCAGGACCCGGTAGGCCTGAGCCTCAACTCTTCAGAA
AATAGTGTTTTTAATATTCTCTTCAGAAAATAGTGTTTTTAATATTCCGAGCTAGAGCTCTTCTCTACGTTT

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FIGURE 3841B

GTAGTCAGCACACTGGGAAACCGGGCCAGCGTGGGGCTCCCTGCCTTCTGGACTCCTGAAGGTCGTGGATGGATG
GAAGGCACACAGCCCCGTGCCGGCTGATGGGACGAGGGTCAGGCATCCTGTCTGTGGCCTTCTGGGGCACCGATT
TACCAGGCCCTCCAGCTGCGTGGTCTCCGCAGACCAGGCTCTGTGTGGGCTAGAGGAATGTCGCCCATTACTCCT
CAGGCCTGGCCCTCGGGCCTCCGTGATGGGAGCCCCCAGGAGGGGTGAGATGCTGGAAGGGGCCGCTTTCTGGG
GAGTGAGGTGAGACATAGCGGCCCCGGGCGCTGCCTTCACTCCTGGAGTGAGTTTCCATTTCCAGCTGGAATCTGC
AGCCACCCCCATTTCTGTTTTCCATTCCCCCGTTCTGGCCGCGCCCCACTGCCCACCTGAAGGGGTGGTTTCCA
GCCCTCCGGAGAGTGGGCTTGGCCCTAGGCCCTCCAGCTCAGCCAGAAAAAGCCCAGAAACCCAGGTGCTGGACC
AGGGCCCTCAGGGAGGGGACCCCTGCGGCTAGAGTGGGCTAGGCCCTGGCTTTGCCCCGTCAGATTTGAACGAATGT
GTGTCCCTTGAGCCCAAGGAGAGCGGCAGGAGGGGTGGGACCAGGCTGGGAGGACAGAGCCAGCAGCTGCCATGC
CCTCCTGCTCCCCCAGCCCTAGCCCTTTAGCCTTTACCCCTGTGCTCTGGAAAGGCTACCAAATACTGG
CCAAGGTCAGGAGGAGCAAAAATGAGCCAGCACCAGCGCCTTGGCTTTGTGTTAGCATTTCTCCTGAAGTGTT
TGTTGGCAATAAAATGCACTTTGACTGTTTGTGTC

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FIGURE 3842

MNSIKNVPARVLSRRPGHSLEAEREQFDKTQAISISKAINTEAPVKEKHARRIILGTHHEKGAFTFWSYAIGLP
LPSSSILSWKFCHVLHKVLRDGHPNVLHDCQRYRSNIREIGDLWGHLHLDYRGQLVNVYTKLLLTAKISFHLKHPQF
PAGLEVTDVLEKAAGTDVNNIFQLTVEMFDYMDCELKLSSESVFRQLNTAIAVSQMSSGQCRLAPLIQVIQDCSH
LYHYTVKLLFKLHSCLPADTLQGHRDRFHEQFHSLRNFFRRASDMLYFKRLIQIPRLPEGPPNFLRASALAEHIK
PVVVIPEEAPEDDEEPENLIEISTGPPAGEPVVVADLFDQTFGPPNGSVKDDRDQLIESLKREVEMLRSELEKIKL
EAQRYIAQLKSQVNALEGELEEQRKQKQKALVDNEQLRHELAQLRAAQLEGERSQGLREEAERKASATEARYNKL
KEKHSELVHVHAE LLRKNADTAKQLT VTQQSQEEVARVKEQLAFQVEQVKRESELKLEEKSDQLEKLKRELEAKA
GELARAQEALSHTEQSKSELSSRLDTLSAEKDALSGAVRQREADLLAAQSLVRETEAALSREQQRSSQEQGELQG
RLAERESQEQGLRQRLLDQFAVLRGAAAEAAAGILQDAVSKLDDPLHLRCTSSPDYLVSRQAEALDAVSTLEEGH
AQYLTS LADASALVAALTRFSLAADI INGGATSHLAPTDPADRLIDTCRECGARALELMGQLQDQALRHMQA
SLVRTPLQGILQLGQELKPKSLDVRQEELGAVVDKEMAATSAAIEDAVRRIEDMMNQARHASSGVKLEVNERILN
SCTDLMKAIRLLVTTSTSLQKEIVESGRGAATQQEFYAKNSRWTEGLISASKAVGWGATQLVEAADKVVLTGKY
EELIVCSHEIAASTAQLVAASKVKANKHSPHLSRLQECRTVNERAANVVASTKSGQEIQIEDRDTMDFSGLSLIK
LKKQEMETQVRVLELEKTLEAERMRLGELRKQHYVLGASGSPGEEVAIRPSTAPRSVTTKKPPLAQKPSVAPRQ
DHQLDKKDGIPYPAQLVNY

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FIGURE 3843

GTCTCTCGAGAAGGCGGGGGCGGGCTGTCCGGCCCCGAGGGCGGTCTGAGCCCGCGGCGCCATGGCTCACGTCTG
GCTCCCGCAAGCGCTCGAGGAGTCGCAGCCGGTCCCGGGGACGGGGGTCTGGAAAAGAGAAAGAAGAAGAGCAGGA
AAGACACCTCGAGGAAGTCTCGGCCTCCACATCCCAAGAGAGAAGCAAGCAGAAGGCCCGGAGGAGAACAAGAT
CCAGCTCCTCCTCCTCTTCTTCCAGTTCTTCTAGCTCCTCTTCTTCTCCTCGTCTCCTCCTCTTCTCCTCCAGTG
ATGGCCGGAAGAAGCGGGGGAAGTACAAGGACAAGAGGAGGAAGAAGAAGAAGAAGAGGAAGAAGCTGAAGAAGA
AGGGCAAGGAGAAGGCGGAAGCACAGCAGGTGGAGGCTCTGCCGGGCCCTCGCTGGACCAGTGGCACCGATCAG
CTGGGGAGGAAGAGGATGGCCAGTCTTGACGGATGAGCAGAAGTCCCGAATCCAGGCCATGAAGCCCATGACCA
AGGAGGAGTGGGATGCCCCGCGAGCATCATCCGCAAGGTGGTGGACCCTGAGACGGGGCGCACCAAGGCTTATTA
AGGGAGATGGCGAGGTCTTAGAGGAAATCGTAACCAAAGAACGACACAGAGAGATCAACAAGCAAGCCACCCGAG
GGGACTGCCTGGCCTTCCAGATGCGAGCTGGGTTGCTTCCCTTGAGGGCCCCCGCTGGCCAAGGCCTGTGGACGAC
GCTGGCGGGCCAGCCTGGGCAGGTTTCAGGGTGCCAGTGGGAAGCCTGATGGGTGCTGGTGGCCTTTCCCCCGTG
GATTGGTCTCTGGCCAGCCAGTCTCTTCTCAGGGGCAGGGGGTGGAGGTTGGGGTCACCGGCCTGCTTGGCAC
CCCCATCTGAAAGAGCAGCACTTCTCAGCTATTAAAGGCCCCCTGGATAGAC

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FIGURE 3844

MAHVGSRKRSRSRSRGRGSEKRKKKSRKDTSRNCSASTSQERSKQKARRRTRSSSSSSSSSSSSSSSSSSSSSS
SSSSDGRKKRGKYKDKRRKKKKKKRKLKKKGKEKAEAQVEALPGPSLDQWHR SAGEEEDGPVLTDEQKSRIQAM
KPMTKEEWDARQSIIRKVVDPETGRTRLIKGDGEVLEEIVTKERHREINKQATRGDCLAFQMRAGLLP

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FIGURE 3845

GCGTGGATGCAACTAGAGAGACAAATCGCCTAGGAAGACTGATCAATCACAGCAAATGTGGGAAGTGCCAAACCA
AACTGCACGACATCGACGGCGTACCTCACCTCATCCTCATCGCCTCCCGAGACATCGCGGCTGGGGAGGAGCTCC
TGTATGACTATGGGGACCGCAGCAAGGCTTCATTGAAGCCACCCGTGGCTGAAGCATTAAACGGTGGGCCCCG
TGCCCTCCCCGCCCCACTTTCCTTCTTCAAAGGACAAAGTGCCCTCAAAGGGAATTGAATTTTTTTTTTACACA
CTTAATCTTAGCGGATTACTTCAGATGTTTTTAAAAAGTATATTAAGATGCCTTTTCACTGTAGTATTTAAATAT
CTGTTACAGGTTTCCAAGGTGGACTTGAACAGATGGCCTTATATTACCAAACTTTTATATTCTAGTTGTTTTTG
TACTTTTTTGCATACAAGCCGAACGTTTGTGCTTCCCGTGATGCAGTCAAAGACTCAGCACAGGTTTTAGAGG
AAATAGTCAAACATGAAGTAGGAAGCCAGGTGAGTCTCCTTTCTCCAGTGGAAGAGCCGGGACCTTCCCCCTGCA
CCCCGACATCCAGGGACGGGGTGTGAGGAAGACGCTGCCTCCCAATGGCCTGGACGGGATGTTTCCAAGCTCTT
GTTCCCTAACGTCTCAACAGGCGCTCACTGAAGTGTATGAATATTTTTTAAAAAGGTTTTTGCAGTAAGCTAGT
CTTCCCTCTGCTTTCTCGAAAGCTTACTGAGCCCCGGGCCCCAAGCACGGGCCGGGCATAGATTTCTCTTCCA
CAAGCTGCCGCTTTTCTGGGCACCTTGAAGCATCAGGGCGTGAAATCAAAGTAGATGTGGGCAGGGAGAGGGTTG
CTTACCTGCCCTGCTGGGGCAGGGTTTCTGAAACTGGGTAAATTCTTTATAGAAATGTGAACACTGAATTTATT
TTAAAAATAATAATAAAAAATTTAAAAAATTTAAAAATA

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FIGURE 3846

MALYYQNFYILVVFVLFLLHTSRTFVLPVHAVKDSAQVLEEIVKHELGSQVSLSPVEEPGPSPCTPDIQGRGVRK
TLPPNGLDGMFPSSCSPNVSTGAH

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FIGURE 3847

CTGGCTTCGGCCTCAGCCCCACCATGGTGACGCTTGCTGAACTGCTGGTGCTCCTGGCCGCTCTCCTGGCCACGG
TCTCGGGCTATTTTCGTTAGCATCGACGCCCATGCTGAAGAGTGCTTCTTTGAGCGGGTCACCTCGGGCACCAAGA
TGGGCCTCATCTTCGAGGTGGCGGAGGGCGGCTTCCTGGACATCGACGTGGAGATTACAGGACCAGATAACAAAG
GAATTTACAAAGGAGACAGAGAATCCAGTGGGAAATACACATTTGCTGCTCACATGGATGGAACATACAAATTTT
GTTTTAGTAACCGGATGTCCACCATGACTCCAAAAATAGTGATGTTACCATTGATATTGGGGAGGCTCCAAAAG
GACAAGATATGGAACAGAAGCTCACCAGAACAAGCTAGAAGAAATGATCAATGAGCTAGCAGTGGCGATGACAG
CTGFAAAGCACGAACAGGAATACATGGAAGTCCGGGAGAGAATACACAGAGCCATCAACGACAACACAAACAGCA
GAGTGGTCCTTTGGTCCTTCTTTGAAGCTCTTGTTCTAGTTGCCATGACATTGGGACAGATCTACTACCTGAAGA
GATTTTTTTGAAGTCCGGAGAGTTGTTTAAAAAGCCTCTTCCTGATGATCCCAACTCAGAATTCAGTGTTTACCAA
ACACCTTGGTCATAATAATGTCAATTAGTTTCTCCATTTTTATTTTCTGAAGTGTACATTACAACTTATGTTTCT
TTGAGATTAATAGATATTGGGGGAAAAACGCCTTTTTAGGAAAATTATAGTGAAAATTTGACAGTTGATTGGCAT
AATTTCTTGTTGAATGCTGCCTCCATTATATAGGTCCTTCAGGAACCTCAAACACTGTAAGTGAAATATGGGAG
TATAGTTTTTATTATTTCTTCTTTTCTTTTGTCTTTCATAATATAATGCAGTTTGTTCAGGAAATCAGCACAAAG
CCTGATAGTACTTTACTAAATGACTGCATTCTTTGGATTCTTCAGTCTATGGTTCAAGTCACTAAAGATTTCAT
TTTTGTTGAGTCCTTATGAGAAACAGCAGTATGAATCTTGACGGTTTCTGCCCGTCCTAATGGCAGAGCTCTCTG
ACTTGGGTGTATGCTGCCAGGCTGGGTACTTTTCACTTTTGTCTTTTCTGTTTTGCTTTAAACTACGACTCAGCA
TACATTTTCCACATACATTTTACATTGTACCTTAGGACTCAGTCATCTCCACTTAAATTGATGACACAAGCAG
CTAATAACCATTTCTGGGTTTCTGCCTAACCCCTAATTGTCTGTTAAAGCCAATTCTCTGGGTGTCCCAGTGAG
TGGTGGCTTTTTTCTTTCCACATTGGCACATTCATTCTCCACTCTTGGCATGTAAGAAATAAGCATTTACAT
AATTGAAAAATCTGGATTTCTGATGCCAAAGGGTTAAAGCTTCTTGATTTTCATTTTCATTGATATACAGCCACT
ATTTTATTTTGTATCAGTGGCCTTTGGGCCACTGTTTCAAGGTACTGACCATCAGTGTGAGCATTAGGGTTTTGGT
TTTTGTTTCTTTGGGTATTTCTTTTTTGGCACATGTGAATCTTGTTTTGTGTAAATGAAATTACTTTCTCTTG
TTCTCTGATGATGGGTTTAAATTAAGAGCATCCGGTTTTGGTATGGGGATGATCCAGGATTATGTTGTGACT
GATACATATTAGTTACTTGTGCTTTTTTTTTTTTTTTTTTGGATCTTTGCAAGGGCAAACTACAAGTAACGAGTT
TTATATAATTAATTTAAATTTGTTACAGGTTTTCATGTTTCAAGATAAACCATACTTCCACCTTGGGTGAGAACAC
TTGCAACAGTTTATTAATGAGGTGACTTTACCTTAGGACAACGTGTCATGCCAAGTTTTTTGTGTGTGTGAAA
CACTTCAAAACTGATTTAAAGATGTAAATTTAAATTTGGTTGTATCTAATATGCCCCAGGTTTCGGTAAATAAAC
AATTCTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3848

MVTLAELLVLLAALLATVSGYFVSIDAHAECCFFERVTSGTKMGLIFEVAEGGFLDIDVEITGPDNKGITYKGDRE
SSGKYTFAAHMDGTYKFCFSNRMSTMTPKIVMFTIDIGEAPKGQDMETEAHQNKLEEMINELAVAMTAVKHEQEY
MEVRERIHRANDNTNSRVLWSFFEALVLVAMTLGQIYYLKRFFEVRV

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FIGURE 3849

ATCTGCGGAAGTGGAGTGC GGGGAGTGCGCCGGAAGAGGGGTACGGAAGTGC GCGCGGAAGTGGGGTGCGGAGGTG
TGCAGCGCGCTGT CAGACTGGCTCGCAGGCGGCGCGGCCGGCGGACCCGTT CGAGACAGCGCGGGCGGCTCGGGT
CCCCTGGGGCTCCGCAGCAGGAGGACGCCATGCGACGACAAGGAGTTAATTGAATACTTTAAGTCTCAGATGAAAG
AAGATCCTGACATGGCCTCAGCAGTGGCTGCCATCCGGACGTTGCTGGAGTTCTTGAAGAGAGATAAAGGGGAGA
CAATCCAGGGTCTGAGGGCGAATCTCACCAGTGCCATAGAAACCCTGTGTGGTGTGGACTCCTCTGTGGCAGTGT
CCTCTGGCGGGGAGCTCTTCCCTCCGCTTCATCAGTCTTGCTCCCTGGAATACTCCGATTACTCCAAATGTAAAA
AGATCATGATTGAGCGGGGAGAACTTTTTCTCAGGAGAAATACACTGTCAAGAAACAAAATTGCAGATCTGTGCC
ATACTTTTCATCAAAGATGGAGCGACAATATTGACTCACGCCTACTCCAGAGTGGTCCCTGAGAGTCTTGAAGCAG
CCGTGGCGGGCCAAAGAAGCGATTTAGTGTATACGTACAGAGTCACAGCCTGATTTGTGAGGTAAAGAAAATGGCCA
AAGCCCTCTGCCACCTCAACGTCCCTGTCACTGTGGTGTCTAGATGCTGCTGTGCGGCTACATCATGGAGAAAGCAG
ATCTTGT CATAGTTGGTGTGAAGGAGTTGTTGAAAACGGAGGAATTATTAACAAGATTGGAACCAACCAGATGG
CTGTGTGTGCCAAAGCACAGAACAAACCTTTCTATGTGGTTGCAGAAAGTTTCAAGTTTGTCCGGCTCTTTCCAC
TAAACCAGCAAGACGTCCCAGATAAGTTTAAGTATAAGGCAGACACTCTCAAGGTCGCGCAGACTGGACAAGACC
TCAAAGAGGAGCATCCGTGGGTGACTACACTGCCCCCTTCCCTTAATCACTCTGCTGTTTACAGACCTGGGCGTGC
TGACACCCTCAGCAGTCAGCGATGAGCTCATCAAGCTCTATCTGTAACCTGTGAGCCCTTTCCCTGCCAAGGTGCA
GCTTACGTAGTTGAGGCAGGGTGAGTAGCTGCTTGACACCCCACTGAGTCAGGCCAAAACCTGAGATGTGTTTAAT
GAAGATTTATGGAGTAAGGACTTAAATCATACATCTTGGAGAACCCTTTCTTACTCATTTCAGTCCCATCTAAAA
ATGTGTCAGCTATTCTAAATCCCAACTTAAATTGTTCTTACGGTTTCTAGAAACTTTCCCTTTTCAGTTTCCAGAA
ATACAAGTTAGATAAATTGGCTACTTAACTGATGAAAGATGAGCCCAAGTCCACCTGTCTTCATCCTCCCCTGCAC
TCCAGACTGATCTGCCTAAAGCAGCGAGATGCAGGCGAAAAGCAGCCACACCCCTCTGCCACAAATGACCAACA
GCTGGTCAGGACGTTACACGCGGTGCCTTGTAAGAGGCAAGAAACACTTGCTGAATCTGCATCTGGCTTCCAGTG
GTAAGCACATTCTCAGCAGGATCAAGCCAAACAGTAAAACTACCAAGAGAACACGAGGAAGGCAGAAACGATG
TTTAGCAACAGTATTCTGCATGGTTCACTGCTTAAGAAAATGCCTTCTGGAATATTTGTAAACTGAAATTCTGTA
TGTGTAAGAGATGTTTAAATATGTTTGGGTCTTAAACAGCTTTTTTAAATTATACTTGGGAATAAATTCAGCATC
TTTTCAAATAAACTCTATGAAAGAC

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FIGURE 3850

MDDKELIEYFKSQMKEDPDMAVAIAIRTLLEFLKRDKGETIQGLRANLITSAIETLCGVDSSVAVSSGGELFLRF
ISLASLEYSDDYCKCKIMIERGELFLRRISLSRNKIADLCHTFIKDGATILTHAYSRVLRVLEAAVAKKRFSV
YVTESQPDLSGKKMAKALCHLNVPVTVVLDAAVGYIMEKADLVIVGAEGVVENGGIINKIGTNQMAVCAKAQNKP
FYVVAESFKFVRLFPLNQDVPDKFKYKADTLKVAQTGQDLKEEHPWVDYTAPSLITLLFTDLGVLTSAVSDEL
IKLYL

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FIGURE 3851

GTGAGTGGCTTCCACAGGCCATGCACCCCGATATCGAGAAAGCCTGGCCCCCACCCTGTCCACTGACCAGAAA
CCTGGCTGCAGGGCCGAGGACTGGTTTGGGGACTGGAGGGCTGGCAGCAGCCTGTACCGTGGCACCCTGACCAC
CTGGCATGGGCTTCGTGGCCTGCTCTCAGGAAGTGGGTCAAGCCCTGGGAACCCTCATCCATGAGAGCTCGATCC
CGTATGAAGGGTGCTGCCGCCCGTGCCATCTGGCCCGGGGGTGACTTTTTTGAACTGTTTATTATATGGTGGATGA
TGATTTTCATCTCACGTGCTGGACGCTGTTCTGTTCAGTGTGCTCTTTGGACTACATTAGTCCCCTGTGGAGCAGC
AGGGCTGGAGATCTCTGCAGTCCCTTCCCCGCCCGCCCTGCCAGAAGGCCGAGGAGGCACGTGGAGGGCCTCCTT
CCTGCAATTCTTCCCTCTCCAGAGTCAGGGAGGGCTGCCAGCCCTGGCCTCACAGCCGTCCCAGATGTTAGGTG
AGCCACTGAGCTCTGTGTIGACCTTGAGGGGCCTGGCTGGGGGGCCCCAGGCTCCATGCCTTCTTGGGAGGGTGG
CCGCCAACGCCTTTCCTGTGTTATGGCAACAGGGAGTGGGCATCTCATCTGCCTGTGGTCAGCTCTCAGACGGCA
GGGAGCGGAGCTGACGTTGGCTGTGCTTGGTCACCGCTGCCATGCCGCAGAGGATGCGCCTAGCTGGGCTGGGGC
CACACGACTATTATGTTGGCCTTGAACGGGGACTGCAGAGCCCTCAGTTTGTCTCCCTTGTTCCTCTGTGGCTGA
GGTGGGAGGGGGAGGGTGGGGTAGGTCCCCCAGCAAGAAAGAGGGACAGGAGCACCCCAGGCAGGACCAAGGAGT
CGGGAGGCCCTGCCTTCTGTCTCCATGGTGAGGGCACAGATGTCTCCCCAGAGCCCAGCGCTGGCAGAATGGA
TTCTGCTCCTGGCTTTGCTTCTGCGGCTTCGGTGAGACAGTTATGGAATAAAATGTTCTTGCAAAAAAAAAA
AAAAAA

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FIGURE 3852

MGFVACSQEVGQALGTLIHESSIPYEGCCRPCHLARG

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FIGURE 3853

AGTTCGTCGCAGCCGGGATTGGGTCGCGGTTCTTGTTTGTGGATCGCTGTGATCGTCACTTGGTGAGTAGCGG
GCTGCTGGGCTGGCCGGGGCTTTCGTGGCCGCCGGGGCCGCTCGGTGGGACGGAAGCGTGTGGAGAGACCGCCAAG
GGCTGTAGTCTGGGTCCGCGAGCAAGGTTGCCCTGAACTGGGGGTTGGGGGGAGCGCAGCAAAATGGCGGCTGTT
CCCAGTCTTGAATGGAAGACGCTTGTGAGGCGGGCTGTGAGGTCTTGAAACAAGGTGGGGGGCATGGTGGGCG
GCAAGAACCCAAGGCTTGTGAGGCCTTCGCTAATGCGGGAAAGCTCTTATTGGGGTGAGATGGGCTGGGGCACCAT
CTGGGGACCCCTGACGTGAAGTTTGTCACTGACTGGAGAATCGGTTTGTCTGCTGTTGCGGGGGCGGCAGTTATG
GCGGTGCCGTTGGGCAGTGCACCCGTACCTTTGGGAGCGCGCGCCCTCGTCTGTCGTGACGTACCCGTTCTGT
TGGCTTATAATGCAGGGTGGGGCCACCTGCCGGTAGGTGTGCGGTAGGCTTTTCTCCGTGCGAGGACGCAGGGT
CGGGCCTAGGGTAGGCTCTCCTGAATCGACAGGCGCCGGACCTCTGGTGAGGGGAGGGATAAGTGAGGCGTCAGT
TTCTTTGGTCGGTTTTTATGTACCTATCTTCTTAAGTAGCTGAAGCTCCGGTTTTTGAAGTATGCGCTCGGGGTGG
CGAGTGTGTTTTGTGAAGTTTTTTAGGCACCTTTTTGAAATGTAATCATTTGGGTCAATATGTAATTTTTCAGTGT
AGACTAGTAAATTTGTCCGCTAAATTTCTGGCCGTTTTTGGCTTTTTTGTGTAGACAATGCAGATCTTCGTGAAGACT
CTGACTGGTAAGACCATCACCTTCGAGGTTGAGCCCAGTGACACCATCGAGAATGTCAAGGCAAAGATCCAAGAT
AAGGAAGGCATCCCTCCTGACCAGCAGAGGCTGATCTTTGCTGGAAAACAGCTGGAAGATGGGCGCACCTGTCT
GACTACAACATCCAGAAAGAGTCCACCTGCACCTGGTGCTCCGTCTCAGAGGTGGGATGCAAATCTTCGTGAAG
ACACTCACTGGCAAGACCATCACCTTGAGGTGGAGCCCAGTGACACCATCGAGAACGTCAAAGCAAAGATCCAG
GACAAGGAAGGCATTCTCCTGACCAGCAGAGGTTGATCTTTGCCGGAAGCAGCTGGAAGATGGGCGCACCTGT
TCTGACTACAACATCCAGAAAGAGTCTACCTGCACCTGGTGCTCCGTCTCAGAGGTGGGATGCAGATCTTCGTG
AAGACCTGACTGGTAAGACCATCACCTTCGAGGTGGAGCCCAGTGACACCATCGAGAATGTCAAGGCAAAGATC
CAAGATAAGGAAGGCATTCTCCTGATCAGCAGAGGTTGATCTTTGCCGGAAGAACAGCTGGAAGATGGTCTGATC
CTGTCTGACTACAACATCCAGAAAGAGTCCACCTTGACCTGGTACTCCGTCTCAGAGGTGGGATGCAAATCTTC
GTGAAGACACTCACTGGCAAGACCATCACCTTGAGGTGAGCCCAGTGACACTATCGAGAACGTCAAAGCAAAG
ATCCAAGACAAGGAAGGCATTCTCCTGACCAGCAGAGGTTGATCTTTGCCGGAAGCAGCTGGAAGATGGGCGC
ACCCTGTCTGACTACAACATCCAGAAAGAGTCTACCTGCACCTGGTGCTCCGTCTCAGAGGTGGGATGCAGATC
TTCGTGAAGACCTGACTGGTAAGACCATCACCTTCGAAGTGGAGCCGAGTGACACCATGAGAATGTCAAGGCA
AAGATCCAAGACAAGGAAGGCATCCCTCCTGACCAGCAGAGGTTGATCTTTGCCGGAAGAACAGCTGGAAGATGGT
CGTACCCTGTCTGACTACAACATCCAGAAAGAGTCCACCTTGACCTGGTGCTCCGTCTCAGAGGTGGGATGCAG
ATCTTTCGTGAAGACCTGACTGGTAAGACCATCACTCTCGAGGTGGAGCCGAGTGACACCATGAGAATGTCAAG
GCAAAGATCCAAGACAAGGAAGGCATCCCTCCTGATCAGCAGAGGTTGATCTTTGCTGGGAAACAGCTGGAAGAT
GGACGCACCTGTCTGACTACAACATCCAGAAAGAGTCCACCTGCACCTGGTGCTCCGTCTTAGAGGTGGGATG
CAGATCTTCGTGAAGACCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACACCATGAGAATGTC
AAGGCAAAGATCCAAGACAAGGAAGGCATCCCTCCTGACCAGCAGAGGTTGATCTTTGCTGGGAAACAGCTGGAA
GATGGACGCACCTGTCTGACTACAACATCCAGAAAGAGTCCACCTGCACCTGGTGCTCCGTCTTAGAGGTGGG
ATGCAGATCTTCGTGAAGACCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACACCATGAGAAT
GTCAAGGCAAAGATCCAAGACAAGGAAGGCATCCCTCCTGACCAGCAGAGGTTGATCTTTGCTGGGAAACAGCTG
GAAGATGGACGCACCTGTCTGACTACAACATCCAGAAAGAGTCCACCTGCACCTGGTGCTCCGTCTCAGAGGT
GGGATGCAGATCTTCGTGAAGACCTGACTGGTAAGACCATCACCTTCGAGGTGGAGCCCAGTGACACCATCGAG
AATGTCAAGGCAAAGATCCAAGATAAGGAAGGCATCCCTCCTGATCAGCAGAGGTTGATCTTTGCTGGGAAACAG
CTGGAAGATGGACGCACCTGTCTGACTACAACATCCAGAAAGAGTCCACTCTGCACTTGGTCTCGCCTTGAGG
GGGGGTGTCTAAGTTTCCCCTTTTAAGTTTTCAACAAATTTTATTGCACTTTCTTTCAATAAAGTTGTTGCATT
CCCAATTGGTGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAGTTTATTTTGCATT

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FIGURE 3854

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLRG
GMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRLR
GGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRRL
RGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
RLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLV
LRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHL
VLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTL
HLVLRRLRGGV

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FIGURE 3855

GGAAGATGGTCGTACCCCTGTCTGACTACAACATCCAGAAAGAGTCCACCTTGCACCTGGTGCTCCGTCTCAGAGG
TGGGATGCAGATCTTCGTGAAGACCCTGACTGGTAAGACCATCACTCTCGAGGTGGAGCCGAGTGACACCATTGA
GAATGTCAAGGCAAAGATCCAAGACAAGGAAGGCATCCCTCCTGATCAGCAGAGGTTGATCTTTGCTGGGAAACA
GCTGGAAGATGGACGCACCCTGTCTGACTACAACATCCAGAAAGAGTCCACCCTGCACCTGGTGCTCCGTCTTAG
AGGTGGGATGCAGATCTTCGTGAAGACCCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACACCAT
TGAGAATGTCAAGGCAAAGATCCAAGACCCTGACTGGTAAGACCATCACT

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[illegible]

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FIGURE 3856B

GGGCTCAGTTCCGGGCGGAAGCATCACCAAAGGCATTCCCAGCACACGGGTGCCCTCGGACAGCGCCATCACATA
CCGCGGCTCCATCACCACGGCACGCCAGCTGACGTCTGTACAAGGGCACCATCACCAGGATCATCGGCGAGGA
CAGCCCGAGTCGTTGGACCGCGGCCGGGAGGACAGCCTGCCAAGGGCCACGTATCTACGAAGGCAAGAAGGG
CCACGTCTTGCTCTATGAGGGTGGCATGTCTGTGACCCAGTGCTCCAAGGAGGACGGCAGAAGCAGCTCAGGACC
CCCCATGAGACGGCCGCCCCCAAGCGCACCTATGACATGATGGAGGGCCGCGTGGGCAGAGCCATCTCCTCAGC
CAGCATCGAAGGTCTCATGGGCCGTGCCATCCCGCCGGAGCGACACAGCCCCACCACCTCAAAGAGCAGACCA
CATCCGCGGGTCCATCACACAAGGGATCCCTCGGTCTACGTGGAGGCACAGGAGGACTACCTGCGTCCGGGAGGC
CAAGCTCCTAAAGCGGGAGGGCACGCCTCCGCCCCACCGCCCTCACGGGACCTGACCGAGGCTACAAGACGCA
GGCCCTGGGCCCCCTGAAGCTGAAGCCGGCCCATGAGGGCCTGGTGGCCACGGTGAAGGAGGCGGGCCGCTCCAT
CCATGAGATCCCGCGCGAGGAGCTGCGGCACACGCCCGAGCTGCCCTGGCCCCGCGGCCGTCAAGGAGGGCTC
CATCACGCAGGGCACCCCGCTCAAGTACGACACCGGCGCGTCCACCCTGGCTCCAAAAGCACGACGTACGCTC
CCTCATCGGCAGCCCCGCGCGGACGTTCCACCCGTGCACCCGTGGATGTGATGGCCGACGCCGGGCACCTGGA
ACGTGCCTGCTACGAGGAGAGCCTGAAGAGCCGGCCAGGGACCGCCAGCAGCTCGGGGGCTCCATTGCGCGCGG
CGCCCCGGTTCATTGTGCTGAGCTGGGTAAAGCCGCGGCAGAGCCCCCTGACCTATGAGGACCACGGGGCACCTT
TGCCGGCCACCTCCCACGAGGTTCCGCCGTGACCACGCGGGAGCCACGCCGCGCTGCAGGAGGGCAGCCTTTC
GTCCAGCAAGGCATCCCAGGACCGAAAGCTGACGTGACGCCTCGTGAGATCGCAAGTCCCCGCACAGCACCGT
GCCCCGAGCACACCCACACCCCATCTCGCCCTATGAGCACCTGCTTCGGGGCGTGAGTGGCGTGGACCTGTATCG
CAGCCACATCCCCCTGGCCTTCGACCCACCTCCATACCCCGCGGCATCCCTCTGGACGCAGCCGCTGCCTACTA
CCTGCCCCGACACCTGGCCCCCAACCCACCTACCCGCACCTGTACCCACCCTACCTCATCCGCGGCTACCCCGA
CACGGCGGGCTGGAGAACCGGCAGACCATCATCAATGACTACATCACCTCGCAGCAGATGCACCAACACGCGG
CACCGCCATGGCCAGCGAGCTGATATGCTGAGGGGCTCTCGCCCCGCGAGTCTCGTGGCCACTCAACTACGC
TGCGGGTCCCCGAGGCATCATCGACCTGTCCCAAGTGCCACACCTGCCTGTGCTCGTGCCCGGACACAGGCAC
CCCAGCCACCGCATGGACCGCTTGCCCTACCTCCCCACCGCGCCACGCCCTTCAGCAGCCGCCACAGCAGCTC
CCCCTCTCCCCAGGAGGTCCAACACACTTGACAAAACCAACCACAGTCCTCGTCCGAGCGGGAGCGAGACCG
GGATCGAGAGCGGGACCGGGATCGGGAGCGGGAAAAGTCCATCCTCACGTCCACCACGAGCGGTGGAGCACGCACC
CATCTGGAGACCTGGTACAGAGCAGAGCAGCGGCAGCAGCGGGGGTGGGGGAGCAGCAGCCGCCCGCCCTC
CCACTCCCATGCCCCACGACCTCGCCCATCTCCCTCGGACCCAGGATGCCCTCCAGCAGAGACCCAGTGTGCT
TCACAACACAGGCATGAAGGGTATCATCACCGCTGTGGAGCCAGCAGCCACGGTCTGAGGTCCACCTCCAC
CTCCTCACCCGTTCCGCCGGCTGCCACATTCCACCTGCCACCCACTGCCACTGGGCGGCACCCTCGATGGGGT
CTACCCTACCCTCATGGAGCCCGTCTTGCTGCCAAGGAGGCCCCCGGGTCCGCCGGCCAGAGCGGCCCGGAGC
AGACACCGGCCATGCCTTCTCGCCAAGCCCCAGCCGCTCCGGGCTGGAGCCCGCTCCTCCCCAGCAAGGG
CTCGGAGCCCCGGCCCCCTAGTGCTTCTGCTCGCCACGCCACCATCGCCCCGACCCCTGCGAAGAACCTCGC
ACCTACCCACGCCAGCCCGGACCCGCGCGCCACCTGCCTCGGCCTCGGACCCGACCGGGAAAAGACTCAAAG
TAAACCCTTTTCCATCCAGGAACCTGGAACCTCGTTCTTGGGTTACCAACGGCAGCAGCTACAGCCCCGAAGGGT
GGAGCCCGTCAGCCCTGTGAGCTCACCCAGTCTGACCCACGACAAGGGGCTCCCAAGCACCTGGAAGAGCTCGA
CAAGAGCCACCTGGAGGGGGAGCTGCGGCCCAAGCAGCCAGGCCCGTGAAGCTTGGCGGGGAGGCGCCACCT
CCCACACCTGCGGCGGCTGCCTGAGAGCCAGCCCTCGTCCAGCCCGCTGCTCCAGACCGCCCCAGGGGTCAAAGG
TCACCAGCGGGTGGTCAACCTGGCCAGCACATCAGTGAGGTATCACACAGGACTACACCCGGCACCACCCACA
GCAGCTCAGCGCACCCCTGCCCGCCCCCTCTACTCCTTCCCTGGGGCCAGCTGCCCGCTCTGGACCTCCGCCG
CCCACCCAGTGACCTCTACCTCCCGCCCCCGGACCATGGTGCCCGGGCCGCTGGCTCCCCCACAGCGAAGGGG
CAAGAGGTCTCCAGAGCCAAACAAGACGTGGTCTTGGGTGGTGGTGAGGACGGTATTGAACCTGTGTCCCCACC
GGAGGGCATGACGGAGCCAGGGCACTCCCGGAGTGCTGTGTACCCGCTGCTGTACCGGGATGGGGAACAGACGGA
GCCAGCAGGATGGGCTCCAAGTCTCCAGGCAACACCAGCCAGCCGCCAGCCTTCTTCAGCAAGCTGACCGAGAG
CAACTCCGCCATGGTCAAGTCCAAGAAGCAAGAGATCAACAAGAAGCTGAACACCCACAACCGGAATGAGCCTGA
ATACAATATCAGCCAGCCTGGGACGGAGATCTTCAATATGCCCGCCATCACCGGAACAGGCCTTATGACCTATAG
AAGCCAGGCGGTGCAGGAACATGCCAGCACCAACATGGGGCTGGAGGCCATAATTAGAAAGGCACTCATGGGTAA
ATATGACCAGTGGGAAGAGTCCCCGCGCTCAGCGCCAATGCTTTAACCCTCTGAATGCCAGTGCCAGCCTGCC
CGCTGCTATGCCCATAACCGCTGCTGACGGACGGAGTGACCACACACTACCTCGCCAGGTGGCGGCGGGAAGGC

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FIGURE 3856C

CAAGGTCTCTGGCAGACCCAGCAGCCGAAAAGCCAAGTCCCCGGCCCCGGGCCTGGCATCTGGGGACCGGCCACC
CTCTGTCTCCTCAGTGCACTCGGAGGGAGACTGCAACCGCCGGACGCCGCTCACCAACCGCGTGTGGGAGGACAG
GCCCTCGTCCGCAGGTTCCACGCCATTCCCCCTACAACCCCTGATCATGCGGCTGCAGGCGGGTGTTCATGGCTTC
CCCACCCCCACCGGGCCTCCCCGCGGGCAGCGGGCCCCCTCGCTGGCCCCCACCACGCCTGGGACGAGGAGCCCAA
GCCACTGCTCTGCTCGCAGTACGAGACACTCTCCGACAGCGAGTGACTCAGAACAGGGCGGGGGGGGGGGCGGTG
TCAGGTCCCAGCGAGCCACAGGAACGGCCCTGCAGGAGCAGGGCGGGCTGCCGACTCCCCCAACCAAGGAAGGAGC
CCCTGAGTCCGCCTGCGCCTCCATCCATCTGTCCGTCCAGAGCCGGCATCCTTGCCCTGTCTAAAGCCTTAACTAA
GACTCCCGCCCCGGGCTGGCCCTGTGCAGACCTTACTCAGGGGATGTTTACCTGGTGCTCGGGAAGGGAGGGGAA
GGGGCCGGGGAGGGGGCACGGCAGGCGTGTGGCAGCCACACGCAGGCGGCCAGGGCGGCCAGGGACCCAAAGCAG
GATGACCACGCACCTCCACGCCACTGCCTCCCCGAATGCATTGGAACCAAAGTCTAACTGAGCTCGCAGCCC
CCGCGCCCTCCCTCCGCCTCCCATCCCGCTTAGCGCTCTGGACAGATGGACGCAGGCCCTGTCCAGCCCCCAGTG
CGCTCGTTCGGTCCCCACAGACTGCCCCAGCCAACGAGATTGCTGGAAACCAAGTCAGGCCAGGTGGGCGGACA
AAAGGGCCAGGTGCGGCCTGGGGGGAACGGATGCTCCGAGGACTGGACTGTTTTTTTACACATCGTTGCCGCAG
CGGTGGGAAGGAAAGGCAGATGTAAATGATGTGTTGGTTTACAGGGTATATTTTGTATACCTTCAATGAATTAAT
TCAGATGTTTTACGCAAGGAAGGACTTACCCAGTATTACTGCTGCTGTGCTTTTGATCTCTGCTTACCGTTCAAG
AGGCGTGTGCAGGCCGACAGTCGGTGACCCCATCACTCGCAGGACCAAGGGGGCGGGGACTGCTGGCTCACGCCC
CGCTGTGTCCTCCCTCCCTCCCTTCCTTGGGCAGAATGAATTCGATGCGTATTCTGTGGCCGCCATCTGCGCAGG
GTGGTGGTATTCTGTCAATTTACACACGTCGTTCTAATTAAGGAATTATACTCCA

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FIGURE 3857

TCGGACGGGCGCGGAGACGCTTCTGGAAGGAACGCCGCGATGGCTGCGCAGGGAGAGCCCCAGGTCCAGTTCAAA
CTTGATTGGTTGGTGATGGTGGTACTGGAAAAACGACCTTCGTGAAACGTCATTTGACTGGTGAATTTGAGAAG
AAGTATGTAGCCACCTTGGGTGTTGAGGTTTCATCCCCTAGTGTTCCACACCAACAGAGGACCTATTAAGTTCAAT
GTATGGGACACAGCCGCCAGGAGAAATTCGGTGGACTGAGAGATGGCTATTATATCCAAGCCCAGTGTCGCATC
ATAATGTTTGATGTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTACGAGTGTGT
GAAAACATCCCCATTGTGTGTGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCCATTGTC
TTCCACCGAAAGAAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTACAACCTTTGAAAAGCCCTTCCTC
TGGCTTGCTAGGAAGCTCATTGGAGACCCTAACTTGGAATTTGTTGCCATGCCTGCTCTCCCGGATGAGGATGAT
GACCTGTGAGAATGAAGCTGGAGCCCAGCGTCAGAAGTCTAGTTTTATAGGCAGCTGTCCTGTGATGTCAGCGGT
GCAGCGTGTGTGCCACCTCATTATTATCTA

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FIGURE 3858

MAAQGPQVQFKLVLVGDGGTGKTTFVKHHLTGEFEKKYVATLGVEVHPLVFHTNRGPVKFNVWDTAGLEKFSGL
RDGYIIQAQSTIIVFDVTSRVTYKNVPNWHRDLV

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FIGURE 3859A

CTTGAAATGACCCGCCACACCTGAAGCCTGCAGGTGCTGAGGCCACATTTCGATCAGACCCAAGCTTTGGGAGAC
CGCTGGGGAAATTTCCCACTTCTCTCTGAGACCAGGAACCTCAGCAGAGAACTTTGTGGAAATGAAGTGAAG
GATGCCACCCAGGGAGAGTATCTCTGAGATCCCATCATGCAGGCCTTTCCACAAGGGCCCGGCAGCATGACAAG
GTGAAGGCAGAGTATGTGCATCTCAACCATCCGCTCACCCCTCGTGACCAGAGAGCGCGATTTGGCCGTGAAGGAG
AAACACCAGCTCCAAGCCAAGCTGGAGAACCTAGAACAGGTCTGAAGCATATGCGAGAGGCGGCTGAACGGCGG
CAGCAGCTGCAGTTGGAGCATGACCAGGCCCTGGCTGTTCTCAGTGCCAAGCAGCAGGAAATTGACCTTCTGCAG
AAGTCCAAGGTTTCGAGAGCTGGAAGAGAAATGCCGGACTCAAAGTGAGCAGTTCAACCTGCTGTCCCGGGACCTG
GAGAAGTTCCGGCAGCACGCTGGCAAGATTGACCTGCTGGGTGGCAGCGCGGTGGCCCCCTGGACATCTCCACG
GCCCCAGCAAGCCTTTCCACAGTTTCATGAATGGCCTAGCCACCTCCCTCGGCAAAGGTCAGGAGAGCGCTATT
GGAGGCAGCTCTGCGATCGGTGAATATATCCGGCCCCCTTCCGCAGCCTGGTGACAGGCCGGAGCCTCTGTCCGCC
AAGCCACCTTCTGTGTCGAGATCCGGTAGCGCAAGATGCAGATCTGAGTCAGACATGGAGAATGAACGGAATTCC
AATACC TCCAAGCAGAGATACTCGGGGAAGGTCCACCTCTGTGTTGCCCGCTATAGTTACAACCCCTTCGATGGA
CCGAACGAGAAACCCGAAGCTGAGCTGCCCCCTACGGCGGGGAAAATACCTCTACGTCTATGGAGACATGGATGAG
GATGGGTTCTATGAAGGAGAGCTCCTCGATGGCCAGAGGGGTCTGGTGCCCTCCAACCTTCGTGGACTTTGTGCAG
GACAACGAGTCGCGGTTGGCAAGCACGCTGGGGAAACGAGCAGGATCAGAACTTCATCAACCATTCGGGCATCGGC
CTGGAGGGAGAGCACATCTGGACCTCCACTCCCCAACCCACATAGATGCGGGCATCACCGACAACAGTGCCGGG
ACCCTGGACGTGAACATCGACGACATCGGAGAAGACATCGTGCCTTACCCTAGAAAAATCACCTCATCAAAACA
CTCGCCAAAAGTGTTATTGTGGGCTGGGAGCCCCCGGCGGTGCCACCAGGATGGGGAACGGTGAGCAGCTACAAC
GTCTTGGTGGAACAAGGAGACACGCATGAACCTCACGCTGGGGAGCAGAACTAAAGCCCTCATCGAGAAGCTCAAC
ATGGCAGCCTGCACCTACCGCATCTCCGTGCAGTGCGTCACCAGCAGGGGCAGCTCGGATGAGCTGCAGTGCACG
CTGCTGGTGGGCAAGGACGTGGTGGTGGCCCCCTCCACCTGCGGGTGGACAACATCACGCAGATCTCCGCCACG
CTCTCTGGCTACCCACCAACAGCAACTACAGCCACGTATCTTCTCAACGAGGAGGAGTTTCGACATCGTCAAG
GCCGCCAGGTACAAGTACCAGTTCTTCAATCTCAGGCCAACATGGCCTATAAGGTGAAGTTCTGGCCAAACCC
CACCAGATGCCGTGGCAGCTCCCGCTGGAGCAAAGGGAGAAGAAGGAGGCCTTTGTGGAGTTCTCCACGTTGCCT
GCAGGACCCCCAGCACCCCCACAAGATGTTACCGTCCAGGCTGGGGTGACCCCGCCACCATCCGGGTCTCCTGG
AGACCACCTGTGCTGACGCCCACCGGGCTGTCCAATGGCGCAAAACGTTACCGGCTACGGCGTGTATGCCAAAGGG
CAGAGGGTGGCTGAAGTCATCTTCCCCACGGCAGACAGCAGCGCCGTGGAGCTTGTGCGGCTGCGGAGCCTGGAG
GCCAAGGGCGTGACCGTGCGGACCCTCTCCGCCAGGGCGAGTCCGTGGACTCTGCAGTTGCTGCCGTTCCCCC
GAGCTCCTGGTGCTCTTACCCCCACCCGAGACCTGCACCCCAATCAAAGCCATTAGCAAGTTCTGGAGTCCCC
GAAACCAAAGACGAGCACCTGGGTCCCCACGCCAGGATGGATGAGGCCTGGGAGCAGAGCCGTGCACCTGGCCCT
GTGCATGGGCACATGCTGGAGCCGCCCGTGGGCCCCGGAAGGCGGTGCGCCCTACCCAGCCGCATCTGCCACAG
CCACAGGGCACCCCGGTGTCCACCACCGTCGCCAAGGCCATGGCCCCGGGAGGCCGCGCAGAGGGTGGCCGAGAGC
AGCAGGTTAGAGAAAAGGAGCGTCTTCTAGAGAGAAGCAGCGCGGGGCAGTACGCCGCCTCAGACGAGGAGGAC
GCCTATGACTCTCCAGACTTCAAGAGGGGGCGCCTCGGTGGACGACTTCTGAAAGGCTCTGAACTTGGCAAG
GACCCGCACGTGTGGCATGGAGACGAGTACCACACAGAGAGCAGCCGGGGGTCTGACCTCTCAGACATCATGGAG
GAGGACGAGGAGGAGCTGTATTCTGAAATGCAGCTGGAAGATGGGGGAAGGAGGCGGCCAGCGGCACGTCCCAC
AATGCCCTCAAGATTTTAGGGAAACCCAGCCTCTGCAGGACGGGTGGATCACATGGGCCGAGGTTTCCCCGTGGC
AGCGCTGGTCTCAGAGGTCCCGGCCCGTGACAGTCCCATCCATCGACGATTACGGGCGAGACCGCCTTTCTCCA
GACTTCTATGAAGAGTCAGAACTGACCCTGGTGCCGAAGAGCTCCCGGCCCGGATCTTTGTGGCTCTCTTTGAC
TAGACCCCGCTCACCATGTCCCCAAACCCAGATGCTGCAGAGGAGGAGCTTCCCTTTAAGAAGGCCAGATCATC
AAGGTTTATGGTGATAAAGACGCTGATGGATTCTACCGTGGGGAAACCTGTGCCCGGCTTGGCCTTATTCTTGT
AACATGGTCTCTGAGATACAAGCAGATGATGAGGAGATGATGGATCAGCTTCTTAGACAGGGCTTTCTCCCTCTG
AATACACCTGTGGAGAAAATAGAGAGAAGCAGGAGAAGTGGCAGGCGTCATTCCGTATCGACGCGGAGAATGGTG
GCCCTGTATGACTACGACCCACAGAGAAAGCTCGCCCAACGTGATGTGAGGCGGAACCTTACATTTTGCACAGGA
GATATTATTACAGTTTTTGGTGAATTTGATGAAGATGGATTTTATTATGGGGAGCTGAATGGGCAGAAAGGCCCTT
GTGCCCTCAAACCTTCTTGAAGAAGTGCTGATGACGTAGAAGTCTATCTTTCTGATGCTCCATCCCACTACTCT
CAAGATACGCCAATGCGCTCAAAGGCCAAAAGGAAGAAGAGTGTTTCAATTCACACCTTAATCAGGCAATGTAGCC
TTCACGTAAGTGAGCAACTGAAGATACCGATAAAGATACCAACTTAAGCTACCTTAACCGGGCCAGTGTGGTAGA

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FIGURE 3859B

CTTAAGGCTTCATTGTGGGGTTAAAAAAAAAAAAAGATACAAAGAAATATGTCTCAAAAACTATTGGACCTAAA
TAATTAGAATATTACTTGGTCTCAGTTGTAAAGCAACTGAATTTATAGTGAAGCAAATCATCTTTAATAATCATT
TCCTACTATTTGCATTAAAGAATATTTGAAAGGCCAACATTGGGAACATATTTCTTAACAAGCTAACTGTGTGTTT
ACATAGAGAGAGCTGCATATTGCATTGTTAGCCACTCTTGAAAAAGCACAACTAACAAACATGTTTACTATAG
GAAGCTTTACTTTAGAACTTAACCCAAGGTCAAGCAGATGAGTAGTGAACACAGGTGATCGAGTGTTGGCTCTG
AACACTCCAAACACTGGCTCGAGTGGCCAGAACGTGTTTTCTTAAGTAACCCTGCCTCTACCTTACGAGAGAGC
TATGCTCCTCCTCAAAGCACAAATCATCCTGTGACAGAAGTTGCTGCAACACGCGTTTTGTTGTTGGTATACCAATG
CAATACTAAGTTGATGAAGCACGCAGCTCAAATGATCACATTAGATGGAATAGATGGTATCTTCAGGTGTACTTT
GGGATGCTTTACTAGGTGTTTTCCATTAGAATTAGACCTTGATTTTAAATCCAAGCAAGCTTGAAGCCCCCTTGGC
TTACAGCATTTGCCTGCTGAATACTAAACACTCACATGGCAAGAGTTGCTCTGGAGAGGTAGGGCCAGAGGAATG
CTGCTGCACTGCCAACTCAGGCACATGCTTAGCTGTAAAGGGGAAGCGAGGTGAAGTCGTCTGCAGCGTATTAGA
GTAAAAGTCTACCCCTCTGAAGCACTATTAAGCGCTTAACGTATATTTAAATACTACCATGTGCTATCTACTGAG
GAAGATTGATGTTCAATTATTTGGAAATAATGCAAGCATCCACTAAGGGCCTTTAAGCTTTCTTTGATTATAATT
AAGGTTCAATTTAGTTTTTTTTTTCTTTCAACCAAGTGTGCCATCTCCAATATTTCTATAGTATACCAACCACCC
CAGGAATGCACTTTAAACAATATCAGGATTTTATATAACCAAATAGTTTCAAATACAACAAAATTCCCTTTATGAA
CTTTCGCTTTTAAAGACTACTGATGGGTACTCGGCCAACTTTACTATCAACCTAATTTGAGATCATGTCTCCCT
GCCCTTAGTCTTCATTTATGAAGTGAATTATTACCTGCCTTAGCTTTGCCAAAGCAACGGCCACCCCGCACTCCC
TCGAGACAGAGAAACGGAACCCACACATTTATGTCTGGGGCCTCTCTCTGGCGTGCTGTGGGAGAGGACCTTGC
TTCTCATGGCATACTTCAACAACTGAAAGAACAATGAACCCCCCTGACCTTTCTGTTGGGAAACGGGGACAGT
ACGATGTTACCAAGTGAATTCGTGTTGGCGCTCACACACTCAATAAAGTGAACACTGTACCTACTAGGTTCC
TCCTGAGGGTTTACAGTACAGCAAGGAGAGCTCCATCCCCACAGTCCATCTCCATTGGGGGTCACCTACGTATC
TATGGGTTCTGGTAGTCTGGGAGAGGCGAGGAAATGTCCTCGAAAAAGAAAAGGGGCTGCTTTCCAAAGGCAA
GAACTGCTGAAAAAGCTGGGTGCAGTGAATGATTGATGTCTCCGGACAACCTGCCAAATCTATGTAATTTT
TTAATTCCAACTAGGGCTTTCATGACTCAAGTACTTCTAAAAAAACCCAATCTTCTCCCCTGACACCAGTAG
AGAAATGCACTTTGGCACTACCAACCACTTTAAACCAACCACGAGAACAAGAGGAGCGGTTGCTCTCTGTACC
GCTGGCAGTCTGCTCTCATTGTCCAAGCTCTGATTGGGAGGTGGGAGGGGACGCTTTATTAACAAACGGGGGCG
CATAGCTATCACCTGTAGCTCCCTCCCTACCTGTAATTCAGTCTTTGTGCATTTGTCTATCTGCCCTTAAAGGAA
TGATTTTCAACCTTTCTCCCTTCTCAAAATGCTTGCTCATAAATGCATAACTTTCACCTTTGACTCTGGTCTTGAA
ATTCCTAGTTTAAATTCGCCTTGATGTTCTGCCTTATAAATGCACAATGATTTGTACTGTCTAATAAAAAACAGTGT
ATACTTTGTATGTGTCGTCATTTCAGTGGTCTTCATCCTGACACAGTGGTTTGAGATCAAGTTGTACAGGCTGTG
CATTTTAAGATACTAGTTTCAGTCTTTCAAAGCCAGCCAGGCTACACACAGAAAATGTTTACTCAATCATTCAA
AAAGAGAAAAGGAGAGAAAGTAACCTTTGTTTGGTAAAGCACCAGTACTCCAACCTTCCAGAAAGCCGATTATCTT
CATTGCTTTTAAATGTTCTATTCTGTGGCATATGGTTTTCTGTTACTTTTCGTTGTCAAAATGCCATACCCAAATAC
ACAGCAATGAATGGCACACAAGTAATCCACATAATGCATAAGCCACACCAAAACCAGACTCAATTTAAATCTGCT
CCAAATGAGTCCATACCCATCTTCATCATTGGCATTGGAACAAAAGACTTACTTACAAAGTTGCTGGCAGATGTA
TTTGATGGTTACTCTTTTGAATTTCTGTCCACTTGTAATTTGTTTTACTCTTTATACATACTTTTCAGACTGC
CTTCTTTTGTAAATTTATGGACGGTTTATAAATGAATGACAAAAGCTTTCCCCATTGTGTCTTCAAAAACGCTATT
ATAAATTGTAATATAATAGTATGTGGTAGATTTATTATTAAAGGAAATCCATGTGTGGTTAAGCTCTGTGTGGGT
GTGTGCATGTGCACAGTTAGTGTAATAATTTCTAGAAATAAAATTTGTTATTTAT

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FIGURE 3860

MREAAERRQQLQLEHDQALAVLSAKQQEIDLLQKSKVRELEEKCRTOSEQFNLLSRDLEKFRQHAGKIDLLGGSA
VAPLDISTAPSKPFPQFMNGLATSLGKGQESAIGGSSAIGEYIRPLPQPGDRPEPLSAKPTFLSRSGSARCRSES
DMENERNSNTSKQRYSGKVHLCVARYSYNPFDPNENPEAELPLTAGKYLYVYGDMDEDGFYEGELLDDGQRGLVP
SNFVDFVQDNE SRLASTLGNEQDQNF INHSGIGLEGEHILDLHSPHIDAGITDNSAGTLDVNIDDIGEDIVPYP
RKITLIKQLAKSVIVGWEPPAVPPGWGTVSSYNVLVDKETRMNLTGSRKALIEKLNMAACTYRISVQCVTSRG
SSDELQCTLLVGKDVVVPAPSHLRVDNITQISAQLSWLPTNSNYSHVIFLNEEEEFDIVKAARYKYQFFNLRPNMAY
KVKVLAKPHQMPWQLPLEQREKKEAFVEFSTLPAGPPAPPQDVTVQAGVTPATIRVSWRPPVLTPTGLSNGANVT
GYGVYAKGQ RVAEVIFPTADSTAVELVRLRSLEAKGVTVRTLSAQGESVDSAVA AVPELLVPPTPHPRPAPQSK
PLASSGVPETKDEHLGPHARMDEAWEQSRAPGPVHGHMLEPPVGPGRRSPSPSRILPQPQGTPVSTTVAKAMARE
AAQ RVAESSRLEKRSVFLERSSAGQYAASDEEDAYDSPDFKRRGASVDDFLKGSELGKQPHCCHGDEYHTESSRG
SDLSDIMEEDEEEELYSEMQLLEDGGRRRPSGTSHNALKILGNPASAGRVDHMGRRFPGRSAGPQRSRPVTVP SIDD
YGRDRLSPDFYEESETDPGAELPARIFVALFDYDPLTMSPNPDAAEEELPFKEGQIIKVYGDKDADGFYRGETC
ARLGLIPCNMVSEIQADDEEMMDQLLRQGLPLNTPVEKIERRRSGRRHSVSTRMVALYDYPRESSPNVDVE
AELTFCTGDIITVFGEIDEDGFYYGELNGQKGLVPSNFFLEEVDDVEVYLSDAPSHYSQDTPMRSKAKRKKSVHF
TP

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FIGURE 3861

GGCGGTGTTGAGGTTGGGTACGGGATGCGGGTCTTTGACTGAAGGGTAGGCCAAGTGGAGGTATCAGGGACGT
CGCGCGGCACAGAAGAGGACCAGCCTGGACGCCGGGGACGCTGTATGTACGGCGCGAGCGGGGGCCGCGCCAAA
CCCAGAGGAAAAGCGGCGCGAAGGAGGAGGCCGGGCCAGGCGGTGCCGGCGGTGGGGGCAGCCGAGTGGAGCTC
TTGGTTTTTCGGCTATGCCTGCAAGCTGTTCCGGGACGACGAGCGGGCCCTGGCTCAGGAACAGGGACAGCACCTC
ATCCCCCTGGATGGGGGACCACAAGATCCTCATCGACAGATATGATGGACGTGGTCACCTGCATGACCTTTCTGAG
TACGATGCTGAGTATTCCACGTGGAACAGAGATTATCAGCTGTCTGAAGAGGAGGCGCGAATAGAGGCCCTGTGT
GATGAAGAGAGGTATTTAGCCTTGCCATACGGACTTGCTTGAGGAGGAGGCAAGGCAAGAGGAAGAATACAAGCGA
TTGAGTGAAGCACTAGCAGAGGATGGGAGCTACAATGCCGTGGGGTTCACTTACGGTAGCGACTATTACGACCCG
TCAGAGCCGACGGAGGAGGAGGCCTTCCAAACAGAGAGAAAAAATGAGGCCGAAAATTTAGAGGAAAATGAA
GAGCCCTTCGTTGCCCCCTTAGGATTGAGCGTCCCGTCTGACGTGGAGTTGCCACCAACCGCTAAAATGCACGCC
ATCATCGAGCGCACGGCCAGCTTCGTGTGCAGGCAGGGAGCACAGTTTGAGATCATGCTGAAGGCCAAGCAGGCC
CGGAACTCCAGTTTGACTTTCTGCGCTTCGACCACTACCTCAACCCCTACTATAAGTTCATCCAGAAAGCCATG
AAAGAGGGACGCTACACTGTCTGGCAGAAAACAAAAGTGACGAGAAAAAAAATCAGGAGTCAGCTCTGACAAT
GAAGATGATGATGATGAAGAAGATGGGAATTACCTTCATCCCTCTCTCTTTGCTTCCAAGAAGTGTAAACGCCTT
GAAGAGCTGATGAAGCCCTTGAAGGTAGTGGACCCAGATCATCCCTTCGACGACTTGTTTGTAAAGGCACAGGCT
GACAGTTCCACTCCCACCCACACAACGCAGACGGTGCCTGTGCAGCCCTCCAGGTGGAGTACACGGCAGAC
TCGACCGTGGCAGCCATGTATTACAGCTACTACATGCTACCGGACGGCACTTACTGCCTGGCGCCGCCCTCCCG
GAATCGACGTGACTACTTACTACAGCACCTTCCTGCTGGCGTGACCGTGTCTAACTCCCTGGAGTGACGACCA
CCGCCCCACCACCTCCTGGGACCACACCACTACCGCCCCCAACCACAGCAGAGACTAGCAGCGGGGCCACCTCCA
CAACCACCACCACAAGTGCACTTGCCCCCGTGGCCGCCATCATCCCCCGCCCCCGACGTCCAGCCCGTGATTG
ACAAGCTGGCCGAGTATGTCGCCAGGAACGGCCTGAAGTTCGAGACCAGTGTTCTGTGCCAAGAATGATCAAAGAT
TTGAGTTCCTGCAGCCGTGGCACCAGTATAATGCTTATTATGAGTTTAAAGAAGCAGTTCTTCTCCAGAAAGAAG
GGGGCGATAGCATGCAGGCTGTGTCTGCACCAGAAGAGGCTCCACAGACTCTGCTCCCGAGAAGCCAAGTGATG
CTGGGGAGGATGGCGCGCCTGAAGACGCAGCCGAGGTGGGAGCACGGGCAGGCTCAGGCGGGAAGAAGGAGGCAT
CGTCCAGTAAGACCGTCCCGGACGGGAAGCTGGTGAAAGCTTCCTTTGCTCCAATAAGCTTTGCAATCAAGGCCA
AAGAAAATGATCTGCTTCCCCTGGAAAAAAATCGTGTTAAGCTAGATGATGACAGTGATGATGATGAAGAAAGCA
AGAAGGCCAAGAAAGTTCTAGTAGTGCTGCAAACTAACCAGCAGTTGCCCCACCCTGTGTAGTTGTTGAGG
AGAAGAAGCCTCAACTTACCCAGGAGGAGCTAGAAGCAAAGCAAGCAAAGCAAAGCTGGAAGATCGCCTCGCAG
CTGCTGCCCCGGGAAAAGCTGGCCAGGCGTCTAAGGAGTCAAAGAGAAACAGCTTCAAGCAGAACGTAAAAGGA
AAGCGGCGTTATTTTTACAGACCCTCAAAAATCCTCTGCCGGAAGCAGAAGCTGGGAAAATTGAGGAGAGTCCTT
TCAGTGTCGAGG

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FIGURE 3862

GTCCGCAATGTTGCCAGTGTCTGTCTGCAGATTGGCTACCCAAC TGTTGCATCAGTACCCCATTCTATCATCAAC
GGGTACAAACGAGTCCTGGCCTTGCTGTGTGGAGACGGATTACACCTTCCCCTCGCTGAAAAGGTCAAGGCCTTC
TTGGCTGATCCATCTGCCTTTGTGGCTGCTGCCCCGTGTGGCTGCTGCCACCACAGCTGCTCCTGCTGCTGCTGCA
GCCCCAGCTAAGGTTGAAGCCAAGGAAGAGTCGGAGGAGTCGGACGAGGATATGGGATTGGTCTCTTTGACTAA
TCACCAAAAAGCAACCAACTTAGCCAGCTTTATTTGCAAAACAAGGAAATTAAAGGCTTACTTCTTTAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3863

MLFVSVCRLATQLLHQYPILSSTGTNESWPCLWRRITPSHSLKRSRPSWLIHLPLWLLPLWLLPPQLLLLLLLQPQ
LRLKPRKSRRSRTRIWDLVSLTNHQKATNLASFICKTRK

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FIGURE 3864A

CGAAGGGGGTGGGCCGGGGAGGGGAGGTTTCGTTCCGCGGAGCGCAGCCAGAACCGGGACCAAGAATCGCCTTC
AGCCCTGTCTGGTGCATCCTTGGCAGAAAGTGAGGAGGAAAAACACCCCCATTGTTAGATGAGGTCTTAATCATGG
AACATTTGAAGTCACGTAAAGAAGGTTCTTTGGCATGGACACAAGTTCAGTGGGAGGATTAGAATTGACTGATCA
GACTCCTGTTTTATTAGGGAGTACGGCCATGGCAACTAGTCTCACGAATGTAGGAAACTCATTTAGTGGTCCAGC
TAATCCTTTAGTGTCTAGATCTAATAAGTTTCAGAACTCGTCAGTGGGAAGATGATGATGATGTTGTTTTATCGA
ACCTGTACAACCTCCCCACCTTCTGTACCAGTGGTAGCTGATCAAAGAACCATAACATTTACATCATCAAAAAA
TGAAGAACTACAAGGAAATGATTCCAAAATTACTCCTTCTCAAAGAGTTGGCATCTCAGAAGGGAAGTGTAAG
TGAGACAATTGTCATTGATGATGAAGAGGACATGGAAACAAATCAAGGGCAAGAGAAAAATTCTCCAATTTTAT
TGAACGAAGACCTCCTGAGACTAAAAACAGAACCAATGATGTGGATTTCTCCACTTCCAGTTTTTCAAGAAGTAA
GGTAAATGCAGGAATGGGTAATAGTGGTATCACCACAGAACCAGACTCTGAAATTCAGATTGCTAATGTTACAAC
TTTAGAAACAGGTGTAAGCTCTGTGAATGATGGCCAATTAGAAAAATACTGACGGGCGAGATATGAACCTTAATGAT
TACACATGTAACATCACTGCAGAATACCAACTTGGGAGATGTCTCTAACGGACTGCAGTCAAGTAATTTTGGTGT
TAATATACAAACATACACCCCATCTTTAACTTCACAGACCAAGACTGGAGTAGGACCTTTTAATCCTGGTAGAAT
GAATGTGGCAGGAGACGTTTTTCAGAAATGGAGAATCTGCAACTCATCATAATCCTGATTCTTGGATCTCCCAGTC
AGCTTCATTTCCCCGTAATCAGAAACAACAGGGGTGGACTCTTTATCACCAGTGGCCTCACTTCCTAAACAGAT
TTCCAGCCGTCTGTCCAACAGCAGCCTACTAAACCAGTTAAAGTCACTTGTGCAAACTGCAAAAAACCTTTACA
GAAGGGCCAGACAGCTTATCAACGAAAAGGATCAGCTCACCTCTTTTGTCTACCACCTGCCTTTCTTCTCTC
CCACAAGCCTGCTCCAAAGAACTCTGTGTTATGTGTAAAAAGATATAACTACAATGAAAGGAACCATTGTTGC
TCAAGTGGATTCAAGTGAGTCCTTCCAGGAATCTGTAGTACATCTTGTTTATCTCTCTATGAAGACAAACAGAA
TCCTACTAAAGGAGCTCTAAATAAATCAAGATGTACAATCTGTGGTAAACTAACTGAGATTGCGCATGAAGTCAG
CTTTAAAAATATGACTCATAAGCTGTGCAGTGACCACTGCTTTAATAGATATAGAATGGCCAATGGTTTAATAAT
GAATTGCTGTGAACAGTGTGGAGAGTACTTGCCAGTAAAGGTGCTGGAAATAATGTTCTGGTGATTGATGGTCA
ACAGAAAAGATTTTGCTGTCAAAGTTGTGTCAGTGAATACAAACAGGTAGGTAGCCATCCAAGCTTCTCTGAAGGA
GGTTCGAGATCACATGCAGGACTCTTTCTTAATGCAGCCTGAGAAATATGGAAGAACTGACAATTTGTACTGGTTG
CCGAACACAGTGCAGGTTTTTTGATATGACTCAGTGTATAGGTCCATATGGATATATGGAGCCATATTGTTCAAC
TGCTTGATGAACAGTCACAAGACAAAATATGCAAAATCACAAAGTTTGGGAATTATTTGCCATTTTGTAAAGCG
AAACTCTTTACCTCAATACCAAGCCACAATGCCTGATGGAAGAACTGTACAACCTTTTGAATTCAGTTGTGTGGC
TAAATTCAGGCTCTAAGTATGCAGTCATCTCCAAATGGCCAGTTTGTAGCGCCAAGTGATATTAGTTGAAATG
CAACTACTGCAAAAATTCCTTTTGTCAAACCAGAAATCCTGGAATGGGAGAAACAAAGTGCATCAGTTCTGCAG
CAAACTTGTTTCAGATGACTATAAGAGTTGCATTGCATAGTTACATATTGCGAATACTGTCAAGAGGAGAAGAC
TCTTCATGAAACAGTAAATTTCTTGGCGTTAAGAGACCTTTCTGTAGTGAAGGCTGCAAAATTATTATACAAACA
GGATTTTGCCAGACGTTTAGGATTGAGATGTGTTACTTGCAACTATTGTTCTCAGCTATGTAAGAAGGGAGCAAC
TAAAGAACTCGATGGTGTGTGAGAGATTTCTGCAGTGAAGATTGCTGTAAAAAATTTTCAAGATTGGTACTACAA
GGCTGCAAGGTGTGACTGTTGTAAATCTCAAGGAACCTTTAAAGAGCGAGTTTCAAGTGGCGTGGGGAATGAAACA
TTTCTGTGATCAACATTGCTTACTGCGTTTCTACTGTCAACAAAATGAGCCCAACATGACAACCTCAGAAAGGACC
TGAAAACCTTACATTATGATCAGGGTTTGTGAGACATCTCGAACCAAAATGACAGGTTTCAAGCACCACCCCTTCTCC
AACACCTAACAAAAGAGATGAAGAACAAAGCAGTTCTTTGCAACCTTTAACAATGACAAAAGCTACTTACTGTAA
ACCTCACATGCAGACCAAACTTGTGTCAGACAGATGATACTTGGAGGACAGAATATGTTCCAGTGCCTATCCCTGT
GCCTGTGTATATCCCAGTTCCCTATGCACATGTACAGTCAGAATATTCTGTTCCTACTACAGTTCTGTTCCTGT
GCCAGTTCTGTTTTTCTGCCTGCTCCATTGGACAGCAGTGAGAAGATTCTGCAGCAATTGAGGAGCTAAAAAG
CAAGGTTTTCTTCAGATGCTCTTGATACAGAGTTGCTTACAATGACGGATATGATGAGTGAAGACGAGGGGAAAAC
AGAGACAACCAACATCAACAGTGTAATTATTGAAACAGATATAATTGGTTTCAGACCTTTTGAAGAACTCTGACCC
AGAGACACAGTCCAGCATGCCTGATGTACCATATGAACCAGATTTGGATATCGAAATAGATTTTCCCAGAGCTGC
TGAGGAGCTTGATATGGAATAATGAATTTTTATTACCACCTGTTTTTGGCGAAGAATATGAGGAACAGCCAGACC
TCGATCTAAAAAAGAGGAGCCAAGAGAAAGGCTGTATCAGGATACCAGTCTCATGATGATAGTTCTGACAATTC
AGAATGCAGCTTTCTTTCAAATATACGTATGGCGTAAATGCATGGAAACACTGGGTCAAACCTAGGCAACTTGA
TGAAGATCTTCTGGTATTAGATGAGTTAAATCTTCTAAATCAGTAAAGTTAAAGAGGATCTACTCTCTCACAC
CACAGCTGAGCTTAACTATGGGTTAGCTCATTTTGTCAATGAGATCCGACGGCCAAATGGAGAGAATTATGCACC

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FIGURE 3864B

TGACAGCATCTATTACCTTTGCCTTGGAATACAGGAGTATTTGTGTGGAAGTAATCGAAAAGACAACATATTTAT
TGATCCTGGATACCAAACATTTGAGCAAGAATTGAATAAAATACTGCGAAGCTGGCAACCAAGCATACTTCCAGA
TGGGTCAATATTCTCTCGAGTTGAAGAAGACTATCTCTGGAGGATAAAACAACCTAGGATCACACTCTCCAGTAGC
TCTTCTGAATACACTGTTCTACTTTAACACTAAGTATTTTGGCCTGAAAACAGTGGAACAACACTTAAGACTTTC
CTTTGGCACTGTGTTTAGGCATTGGAAAAAAATCCTTTAACGATGGAAAACAAAGCGTGTCTTCGATACCAAGT
GTCTTCCTTGTGTGGAACAGATAATGAAGATAAAATTACTACTGGAAAAGAAAACATGAAGATGATGAGCCAGT
ATTTGAACAAATTGAAAACACAGCCAATCCTTCCAGATGTCCTGTGAAAATGTTTGAATGCTACTTGTCTAAAAG
TCCACAGAACTCTTAATCAGAGGATGGATGTTTTTATTTGCAACCAGAATGCTCTAGTTCTACAGATAGCCCTGT
CTGGTATACGTCTACTTCACTGGACCGAAACACCTTGGAAAATATGCTTGTACGGGTTCTTCTAGTAAAAGATAT
TTATGATAAAGACAATTATGAACTGGATGAAGACACAGACTTAAAAAGGAACGTTGCAGAAGCAATCGGGATAAAA
CAGCATTAGATAGTCATGCTGCTAGATCTTTATTATGGAAAACATTTCAAGTTTACTCCTTCTGTTTTGAGTTTT
GTAGCAGTGTACCCACGCTGGGTATTACCATGTAAATAATCTGTGAGTGAAAGTTGCCATTATTCTATGTAGTGG
TTTTAGGATACTTAACAAATACATTCAAATTCCTTTTTTATTATTATTTATTTGATTAGGTATGTTTGTAACCTT
TTACATTACAGAAATATGAATGAGAAATGTGCCATGTATAATTTTTTCTTGTAGTAAGAAACATCCATATTGCACA
ACTCTACTGTTGCAAAGCTTCCTTGGAAGGGGGCTCTTTTACTGGGTTCTTAACCAGATGGTTGTGTATGGGTAG
CACTACTAAAAGTTTAGAACTTGCAGTGTCTTTTCGGAATTTTTAAATAAACTGTAAACTAATAGGCTGGGGTTT
TTGTTTTGTTTTGGGGTTTTGTTTTGTTTGGTTTTACATTTTAGTTACTGAAGCCTTACAAGGTTATGTAGAGAG
ATACCATCTTCTGTACCAAAAATAGACAAGAGAATGCTGTCAATATTGGTGTACTGTAATGTGAATCTATGCTGG
TGAAAACAATTTTTTGTTCCTTATTAAAACCTTAGTGTCTTTTCTCATTTGTGGCTTTCTGCATCACCCAAT
CAATAAAAAACAAATATATATATGT

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FIGURE 3865

MDTSSVGGLELTDQTPVLLGSTAMATSLTNVGNFSFSGPANPLVSRSNKFQNSSVEDDDDVVFIIEPVQPPPPSVPV
VADQRTITFTSSKNEELQGNSKITPSSKELASQKGSVSETIVIDDEEDMETNQGQEKSSNFIERPPETKNRT
NDVDFSTSSFSRSKVNAGMNGSGITTEPDSEIQIANVTTLTGVSVDGQLENTDGRDMNLMITHVTSLQNTNL
GDVSNGLQSSNFGVNIQTYTPSLTSQTKTGVPFNPGRMNAGDVVFQNGESATHHNPDSWISQSASFPRNQKQPG
VDSLSPVASLPKQIFQPSVQQQPTKPVKVICANCKKPLQKQOTAYQRKGS AHLFCSTTCLSSFSHKPAPKKLCVM
CKKDITTMKGTIVAQVDSSESFQEF CSTSCLSLYEDKQNP TKGALNKSRTCICGKLTEIRHEVSFKNMTHKLCSD
HCFNRYRMANGLIMNCCEQCGEYLP SKGAGNNVLVIDGQQKRFCCQSCVSEYKQVGSHPSFLKEVRDHMQDSFLM
QPEKYGKLTTCTGCR TQCRFFDMTQCIGPNGYMEPYCSTACMNSHKTKYAKS QSLGIICHFCRNSLPQYQATMP
DGKLYNFCNSSCVAKFQALSMQSSPNGQFVAPSDIQLKCN YCKNSFC SKPEILEWENKVHQFCSKTCSDDYKKLH
CIVTYCEYQCEEKTLHETVNFSGVKRPF CSEGCKLLYKQDFARRLGLRCVTCNYCSQLCKKGATKELDGVVRDFC
SEDCKKFQDWYYKAARCDCKSQGTLKERVQWRGEMKHFCDQHCLLRFYCQNEPNMTTQKGPENLHYDQGCQT
SRTKMTGSAPPPSPTPNKEMKNKAVLCKPLTMTKATYCKPHMQTKSCQTDDTWRT EYVPVPIPVVYIIPVPMHMY
SQNIPVPTTVPVVPVVPVFLPAPLDSSEKIPAAIEELKSKVSSDALDTELLTMTDMSEDEGKTETTININSVIE
TDIIGSDLLKNSDPETQSSMPDVPYEPDL DIEDFPRAAEELDMENEFLLPPVFGEEYEEQPRPRS KKKGAKRKA
VSGYQSHDDSSDNSECSFPFKYTYGVNAWKHWKTRQLDEDLVLDELKSSKSVKLKEDLLSHTTAELNYGLAHF
VNEIRRPNGENYAPDSIYYLCLGIQEYLCGSNRKDNIFIDPGYQTFEQELNKILRSWQPSILPDGSIFSRVEEDY
LWRIKQLGSHSPVALLNTLFYFNTKYFGLKTVEQHLRLSFGTVFRHWKKNPLTMENKACLRYQVSSLCGTDNEDK
ITTGKRKHEDDEPVFEQIENTANPSRCPVKMFECYLSKSPQNLNQRMDV FYLQPECSSSTDSPVWYTSTSLDRNT
LENMLVRVLLVKDIYDKDNYELDEDTD

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FIGURE 3866

ATGGATTGGGGCACGCTGCAGACGATCCTGGGGGGTGTGAACAAACACTCCACCAGCATTGGAAAGATCTGGCTC
ACCGTCCTCTTCATTTTTTCGCATTATGATCCTCGTTGTGGCTGCAAAGGAGGTGTGGGGAGATGAGCAGGCCGAC
TTTGTCTGCAACACCCTGCAGCCAGGCTGCAAGAACGTGTGCTACGATCACTACTTCCCCATCTCCCACATCCGG
CTATGGGGCCCTGCAGCTGATCTTCGTGTCCAGCCCAGCGCTCCTAGTGGCCATGCACGTGGCCTACCGGAGACAT
GAGAAGAAGAGGAAGTTCATCAAGGGGGAGATAAAGAGTGAATTTAAGGACATCGAGGAGATCAAAACCCAGAAG
GTCCGCATCGAAGGCTCCCTGTGGTGGACCTACACAAGCAGCATCTTCTTCCGGGTCATCTTCGAAGCCGCCTTC
ATGTACGTCTTCTATGTCATGTACGACGGCTTCTCCATGCAGCGGCTGGTGAAGTGCAACGCCTGGCCTTGTCCC
AACACTGTGGACTGCTTTGTGTCCCGGCCACGGAGAAGACTGTCTTCACAGTGTTTCATGATTGCAGTGTCTGGA
ATTTGCATCCTGCTGAATGTCAGTGAATTGTGTTATTTGCTAATTAGATATTGTTCTGGGAAGTCAAAAAGCCA
GTTTAA

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FIGURE 3867

MDWGTLQTLGGVNHSTSIGKIWLTVLFI FRIMILVVAKEVWGDEQADFVCNTLQPGCKNV CYDHYFPISHIR
LWALQLIFVSSPALLVAMHVAYRRHEKKRKFIKGEIKSEFKDIEEIKTQKVRIEGLWWTYTSSIFFRVIFEAAF
MYVFYVMYDGFMSQRLVKCNAWPCPNTVDCFVSRPTEKTVFTVFMIAVSGICILLNVTELCYLLIRYCSGKSKKP.
V

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FIGURE 3868

CAGAGGGGTCATAGGGCGTTGTTCTGGATTCCGGTCGTAACCTTAAAGGGAACTTTTACAATGTCCGGAGCCCT
TGATGTCCTGCAAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTAGGTGGCACCAATCT
TGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTATATCATAAAATCTGAAGAAGACCTG
GGAGAAGCTTCTGGCCGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGCCTTCCGGGAGCCACGGCTT
CTTGTGGTTACTGACCCCAGGGCTGACCCACCAGCCTCTCACGGAGGCGTCTTATGTTAACCTACCTACCATTGC
TCTGTGTAACAGATTCTCCTCTGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCGCTCAGTGG
GTTTGATGTGGTGGATGCTGGCTCGGGAAGTTCTGCGCATGCGTGGCACCATTTCTCGTGAACACCCATGGGAGG
TCATGACTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCGG
TGACCAAGGAGGAATTTCAAGGTGAATGGACTGCTCCAGCTCCTGAGTTCACCTGCTACTCAGCCTGAGGTTGCAG
ACTGGTCTGAAGGTGTGCAGGTGCCCTCTGTGC

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FIGURE 3869

GGGAAACTTTCACAATGTCCGGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCA
CAGGAACCCACTTAGGTGGCACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCA
TCTATATCATAAATCTGAAGAAGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCTATTGTTGCCATTGAAAACC
CTGCTGATGTCAGTGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCGGCCACTGGAG
CCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGTCTTATGTAAACCTACCTACC
ATTGCTCTGTGAACAGATTCTCCTCTGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCGCTC
AGTGGGTTTGATGTGGTGATGCTGGCTCGGGAAGTTCTGCGCATGCGTGGCACCATTTCTCGTGAACACCCATG
GGAGGTCATGACTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTGCTGA

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FIGURE 3870

ATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTATATCATAAATCTGAAGAAGACCTGGGAGAAGCTT
CTGCTGGCAGCTCGTGCTATTGTTGCCATTGAAAACCCTGCTGATGTCAGTGTTATATCCTCCAGGAATACTGGC
CAGAGGGCTGTGCTGAAGTTTGCTGCGGCCACTGGAGCCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTC
ACTAACCAGATCCAGGCAGCCTTCCGGGAGCCACGGCTTCTTGTTGTTACTGACCCAGGGCTGACCCACCAGCC
TCTCACGGAGGCGTCTTATGTTAACCTACCTACCATTTGCTCTGTGTAAACAGATTCTCCTCTGCGCTATGTGGACA
TTGCCATCCCATGCAACAACAAGGGAGCTCGCTCAGTGGGTTTGATGTGGTGGATGCTGGCTCGGGAAGTTCTGC
GCATGCGTGGCACCATTTCTCGTGAACACCCATGGGAGGTCATGACTGATCTCTACTTCTACAGAGATCCTGAAG
AGATGGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGTG
TGCAGGTGCCCTCTGTGCCTATTAGCAGTTCCCTACTGAAGACTGGAGCGCTCAGCCTGCCACGGAAGACTGGT
CTGCAGCTCCC

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FIGURE 3871

MEQYIYKRKSDGIYIINLKKTWEKLLLAARAIVAIENPADVSVISSRNTGQRAVLKFAAATGATPIAGRFTPGTF
TNQIQAAFREPRLLVVTDPRADPPASHGGVLC

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FIGURE 3872

GCGGCAGGTGAGTAGCTGTGCGAATTCGGTTCTCTAGGGAACCTCCTTCTTCGCCTGCTGGCCTTACCTGGGCTCC
CCGCTTCTCTGGAGGGGAGGCGGTGCGGGAACCTCCCGTAGGCGTGAGCTGGAGCGCGCGCCGCTGCTCTCTCCA
GGTCCCGCCGCGCCAGTTTCGCCTCCGCAAAGCCCCGTCCCTCTCTTCCGCAGGCACCAATGTTCTGACTGCGCTCC
TCTGGCGCGGCCGCATTCCCGGCCGTCA GTGGATCGGGAAGCACCGCGCGCCGCGGTTTCGTGTCTGTTGCGCGCCA
AGCAGAACATGATCCGCCGCCTGGAGATCGAGGCGGAGAACCATTACTGGCTGAGCATGCCCTACATGACCCGGG
AGCAGGAGCGCGGCCACGCCGCGGTGCGCAGGAGGGAGGCCTTCGAGGCCATAAAGGCGGCCGCCACTTCCAAGT
TCCCCCGCATAGATTTCATTGCGGACCAGCTCGACCATCTCAATGTCACCAAGAAATGGTCCTAATCCTGAGTCG
TCACCCTTGGATTTTATGGATCACGGAGCTGACCATCTTTACCTGGTCCTGGAAGTGAAGAACTGTAGCTTGTGT
GAAAATGAGCCTTTGGACCAGTCTTTATTAAAACAAACAAACATGAGTAGTCTGCATATCGAATATCTAGAGCTC
TAAACCCCCCAATACTTAAAAGTCTAATTGCTGTCTGTGGTTTCATTAGTCTGATAGGAAGATAGGGATTTCTT
CAGTCACAGATGATATTTTGAAGGAAAGCTGCAATAAAGCCACAATGATTTGAGGTCTTTGCTTAAGTATGAGAT
ACTTGATGGGGGCTTTATCATGCAACATTAGTTTGCTTACCTTAAGAATTGCCCAAAAATGAAAGAAAATATGAG
CTTTTCAGTTAAACATACTCCTAAAAACATTTTCCGGGATTTTACTACTAAAATTGGACATTTAAGCGAAGTAAA
AGAGGCCGGGTGCGGTGGCTCACGCCGTGAATCCCAACACTTTAGGAGTCCAAGGCGGGCGGATCACTTGAGGTC
AGGAGTTCAAGACCAGCTTGGCCAAGGTGATAAAACCCGTCTCTACTAATAACAAAAAAATTAGCTGGGTATGTT
GGTGCAGGCTTGCAATCCAGCTACTTGGGACGCTGAGGTGGGAGGATCGCCTGAACCTCAGAGGCAGAGGTTGC
AATGAAGCGGAGGTTGCAGTGAGCCGAGAGCATGCCGCTGCACTCCAGCCTGGGAGACTGCATCTCAAAAAGAA
AAATAAACGAAGTAAAAGATATTTATCAGAAAAA

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FIGURE 3873

MFLTALLWRGRIPGRQWIGKHRRPRFVSLRAKQNMIRRLEIEAENHYWLSMPYMTREQERGHAAVRRREAFEAIK
AAATSKFPPHREFIADQLDHLNVTKKWS

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FIGURE 3874

CTCTTCCTAAGCCGGCGCTCGGCGAGTTCTCCCAGGAGAAGGCCATGTTTCAGTTTCGAGCGCCAAGATCGTGAAGC
CCAATGATGAGAAGCCGGACGAGTTTCGAGTCCGGCATCTCCCAGGCTCTTCTGGAGCTGGAGATGAACTCGGACC
TCAAAGCTCAGCTCAGGGAGCTGAATATTACGGCAGCCAAGGAAATTGAACTTGGTGGTGGTTCGGAAAGCTATCA
TAATCTTTGTTCCCATTCCTCAACTGAAATCTTCCAGAAAATTCAAGTCCGGCTAGTACGCGAATTGGAGAAAA
AGTTCAGTGGGAAGCATGTCGTCTTTATCGTTCAGAGAAGAATTCTGCCTAAGCCAACCTCGAAAAAGCCGTACAA
AAAAAAGCAAAAGCGTCCCAGGAGCCATACTCTGACAGCTGTGCACGATGCCATCCTTGAGGACTTGGTCTTCC
CAAGCGAAATTGTGGGCAAGAGAATCCGCGTGAACTAGATGGCAGCCGGCTCATAAAGGTTTCAATTTGGACAAAG
CACAGCAGAACAATGTGGAACACAAGGTTGAACTTTTTCTGGTGTCTATAAGAAGCTCACGGGCAAGGATGTTA
ATTTTGAATTCACAGAGTTTCAATTACAAACAAAAATGACTACATAAAAAATATATATTCACA

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FIGURE 3875

MFSSSAKIVKPNDEKPDEFESGISQALLELEMNSDLKAQLRELNITAAKEIELGGGRKAI IIFVPIPOLKSFQKI
QVRLVRELEKKFSGKHVVFIVQRRILPKPTRKSRTKNQKRPRSHTLTAVHDAILEDLVFPSEIVGKRIRVKLDG
SRLIKVHLDKAQQNNVEHKVETFSGVYKKLTGKDVNFEFPEFQL

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FIGURE 3876

GCCTGCGGGCAGCCGTGCCGAGAATGAACCCCAGCACCCCCAGCTACCCAACGGCCTCGCTCTACGTGGGGGACC
TCCACCCCGACGTGACTGAGGCGATGCTCTACGAGAAGTTCAGCCCCGCGAGGGCCCATCCTCTCCATCCGGATCT
GCAGGGACTTGATCACCAGCGGCTCCTCCAACCTACGCGTATGTGAACCTCCAGCATAACGAAGGACGCGGAGCATG
CTCTGGACACCATGAATTTTGATGTTATAAAGGGCAAGCCAGTACGCATCATGTGGTCTCAGCGTGATCCATCAC
TTCGAAAAAGTGGAGTGGGCAACATATTCGTTAAAAATCTGGATAAGTCCATTAATAATAAAGCACTGTATGATA
CAGTTTCTGCTTTTGGTAACATCCTTTTCGTGTAACGTGGTTTGTGATGAAAATGGTTCCAAGGGTTATGGATTTG
TACACTTTGAGACACACGAAGCAGCTGAAAGAGCTATTAAAAAAATGAACGGAATGCTCCTAAATGGTCGCAAAAG
TATTTGTTGGACAATTTAAGTCTCGTAAAGAACGAGAAGCTGAACCTGGAGCTAGGGGCAAAAGAGTTCCCCAATG
TTTACATCAAGAATTTTGGAGAAGACATGGATGATGAGCGCCTTAAGGATCTCTTTGGCAAGTTTCGGGCCCCGCT
TAAGTGTGAAAGTAATGACCGATGAAAGTGGAAAATCCAAAGGATTTGGATTGTAAAGCTTTGAAAGGCATGAAG
ATGCACAGAAAGCTGTAGATGAGATGAATGGAAAGGAGCTCAATGGAAAACAAATTTACGTTGGTCGAGCTCAGA
AAAAAGTGGAAACGGCAGACGGAACCTTAAGCGCACATTTGAACAGATGAAGCAAGATAGGATCACCAGATACCAGG
TTGTTAATCTTTATGTGAAAAATCTTGATGATGGTATTGATGATGAACGCTCTCCGGAAAAGCGTTTTCTCCATTTG
GTACAATCACTAGTGCAAAGGTTATGATGGAAGGTGGTCGCAGCAAAGGGTTTGGTTTTGTATGTTTCTCCTCCC
CAGAAGAAGCCACTAAAGCAGTTACAGAAATGAACGGTAGAATTGTGGCCACAAAGCCATTGTATGTAGCTTTAG
CTCAGCGCAAAGAAGAGCGCCAGGCTTACCTCACTAACGAGTATATGCAGAGAATGGCAAGTGACGAGCTGTGC
CCAACCAGCGAGCACCTCCTTCAGGTTACTTCATGACAGCTGTCCACAGACTCAGAACCATGCTGCATACTATC
CTCCTAGCCAAATTGCTCGACTAAGACCAAGTCCTCGCTGGACTGCTCAGGGTGCCAGACCTCATCCATTCCAAA
ATAAGCCCAGTGCTATCCGCCCAGGTGCTCCTAGAGTACCATTTAGTACTATGAGACCAGCTTCTTCACAGGTTT
CACGAGTCATGTCAACGCAGCGTGTGCTAACACATCAACACAGACAGTGGGTCCACGTCCTGCAGCTGCTGCTG
CTGCTGCAGCTACCCCTGCTGTGCGCACGGTTCCACGGTATAAATATGCTGCGGGAGTTCGCAATCCTCAGCAAC
ATCGTAATGCACAGCCACAAGTTACAATGCAACAGCTTGCTGTTTCATGTACAAGGTCAGGAACTTTGACTGCCT
CCAGGTTGGCATCTGCCCCCTCTCAAAAGCAAAAGCAAAATGTTAGGTGAACGGCTCTTTCCTCTTATTCAAGCCA
TGCACCCCTACTCTTGCTGGGAAAATCACTGGCATGTTGTTGGAGATTGATAATTCAGAACTTCTTTATATGCTCG
AGTCTCCAGAGTCACCTCGTTCTAAGGTTGATGAAGCTGTAGCTGTACTACAAGCCCACCAAGCTAAAGAGGCTA
CCCAGAAAGCAGTTAACAGTGCTACCGGTGTTCCAACCTGTTAAAAATTGATCAGAGACCACGAAAAGAAATTTGT
GCTTCACCGAAGAAAAATATCTAAACATCGAGAACTATGGGAAAAAAATTCGAAAATCTAAAATAAAAAATGC
AAAAATCTAAAATAAAAAATGGAAAGGAACTTTGAACCTTATGTACCGAGCAAATGCAAGGCTAGCAAAATATAA
TGCTAGTCCTAGATTACTTATTGATTTAAAAACAAAAAAGATTACTTAATTTTGATTTAAAAACAAAAAATCG
TAAAATACAAAAACCAGTTAATGTTTGTAGACCCTGGGAAAAGAATTTTCAGCAAAGTACAAAAATTTAAAGCA
TTCCTTTAATTTTTTAATTTCTTACTGTGGAATAGCTCAAAATGTCCATTCTGTTTTAAGTAACAGAATTGATAA
CTGAGCAAGGAAACATGGTTTGGATTATAAAATCTTGCTTTAATAAAAATTTCTTAAACAGTGAAA

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FIGURE 3877

CTCAGAACCATGCTGCATACTATCCTCCTAGCCAAATTGCTCGACTAAGACCAAGTCCTCGCTGGACTGCTCAGG
GTGCCAGACCTCATCCATTCCAAAATAAGCCCAGTGCTATCCGCCAGGTGCTCCTAGAGTACCATTTAGTACTA
TGAGACCAGCTTCTTCACAGGTTCCACGGTATAAATATGCTGCGGGAGTTCGCAATCCTCAGCAACATCGTAATG
CACAGCCACAAGTTACAATGCAACAGCTTGCTGTTTCATGTACAAGGTCAGGAAACTTTGACTGCCTCCAGGTTGG
CATCTGCCCCCTCCTCAAAAGCAAAAGCAAATGTTAGGTGAACGGCTCTTTCCTCTTATTCAAGCCATGCACCCTA
CTCTTGCTGGGAAAATCACTGGCATGTTGTTGGAGATTGATAATTCAGAACTTCTTTATATGCTCGAGTCTCCAG
AGTCACTCCGTTCTAAGGTTGATGAAGCTGTAGCTGTACTACAAGCCCACCAAGCTAAAGAGGCTACCCAGAAAAG
CAGTTAACAGTGCTACCGGTGTTCCAAGTGTAAATTTGATCAGAGACCACGAAAAGAAATTTGTGCTTCACCG
AAGAAAAATATCTAAACATCGAGAACT

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FIGURE 3878A

GCCTTCGCCGCCGTTGGGGCTGGAAGTTCGCCAGGTCCGTGCCGGGCGAGAGAGATGCTGCCCGGCCCGCCTC
GGCTTTGAGGCGAGAGAAGTGTCCAGACCCATTTGCGCTTGCTGACGGCGTCGAGCCCTGGCCAGACATGTCCA
CAGGGTTCTCCTTCGGGTCCGGGACTCTGGGCTCCACCACCGTGGCCGCCGGCGGGACCAGCACAGGCGGCGTTT
TCTCCTTCGGAACGGGAGCGTCTAGCAACCCCTTCTGTGGGGCTCAATTTTGAAAACTTGGAAGTACTTCAACTC
CAGCAACTACATCTGCTCCTTCAAGTGGTTTTGGAACCGGGCTCTTTGGATCTAAACCTGCCACTGGGTTCACTC
TAGGAGGAACAAATACAGGAATAGCAACAACATAACTACAGGATTAACCTGCGGAACGCCAGCCACTACATCTG
CAGCTACAACAGGCTTCAGTTTAGGATTCAATAAACCTGCAGCATCTGCCACACCATTGTCTACCTATTACCT
CTACCTCAGCTAGCGGTCTGACTCTTTCGTCTGCTCTGACATCAACTCCAGCAGCATCCACAGGATTTACTCTAA
ATAATTTGGGTGGGACAACAGCCACAACATAACTGCATCAACAGGCCTCTCTTAGGGGGAGCCTTAGCTGGTT
TGGGAGGTTCACTTTTCCAGAGTACAAACACAGGAACATCAGGACTTGGACAGAAATGCTTAGGGTTGACTTTGG
GAACTACAGCAGCTACTTCAACTGCAGGCAATGAAGGCCTTGGTGGTATAGATTTAGTAGCTCCTCAGATAAAA
AGAGTGATAAAACGGGAACAAGACCAGAGGATAGTAAAGCTCTGAAGGATGAAAATCTACCTCCTGTCATCTGCC
AGGATGTTGAAAATCTCCAGAAATTTGTGAAGGAGCAGAAACAAGTTCAAGAAGAAATAGTAGAATGTCTTCAA
AAGCAATGCTTAAGGTACAAGAAGATATTAAAGCTCTGAAGCAGCTCCTGTCGTTGGCTGCCAATGGAATACAGA
GAAACACTCTCAACATTGACAAATTGAAATAGAACTGCTCAGGAGTTGAAGAATGCTGAAATAGCTTTAAGAA
CCCAGAAGACACCACCTGGACTTCAACATGAATATGCAGCTCCTGCTGACTACTTCAGAATCTTGGTTCAGCAAT
TTGAGGTACAGCTTCAGCAGTACAGGCAGCAGATTGAAGAACTAGAAAACCATCTTGCCACTCAAGCAAATAATT
CACATATAACCCCTCAAGATTTGTCAATGGCTATGCAGAAAATTTATCAACATTTGTAGCTTTAGCGGCACAAC
TTCAGTCTATTATGAAAATGTAAAGGTTCTGAAAGAACAGTACCTTGGCTACAGGAAAATGTTCTTGGGAGATG
CTGTTGATGTGTTTGAAACAAGGCGAGCAGAAGCCAAGAAGTGGCAGAACACACCCAGAGTTACTACTGGACCCA
CTCCTTTCAGCACCATGCCAAACGCAGCAGCCGTTGCCATGGCTGCAACACTTACACAGCAGCAACAGCCTGCTA
CAGGTCTGAACGCATTCAAGTTATAGCTTCTTACTGTTCGAATGCAGAACATTTATGTGCGTTTTATAAGTCTT
CCATTTGTGTGAGCACTGAAGAAATTTCTATGAGTAGCTGTTCCAATACAATCTAAAATGTGATGGACACGATT
ATAAACATACCTGATAAAAAAGGCAGGGTAGTCTTAGCAATAATTATACATCAATTAGATATTGAATATTGTGAA
TCTACTTAATGTTATTTGCTGTAATGCTATAAATGCCCTTTAGAACATGGTGTTCCTAGTGAATTACATTTAA
GAATAACATTAGATTCTGAAATCATGACTGTACCATTATTGTTTTAAAGTCAGAGATCATCCATCCATTTCTTG
AATTTTTCATATATGATACTGATAGGTGGTGCATTCTCATTTCCTCATACATAGTGATTACAAAGTACCCACAT
TCAGGATGAAGTATGCTTTTATTGACTGAAGGTATGTTGAAGATCAATAGGCTTGTGTTGATGTATGTTGACTGT
AAACAGAATACAAGCCCTCTAAACCAATTTTGAAGATGATACATGCTAGAATTGTACCTTTCCAAGGTGAACAG
AACAGCAAGAGCAGGAAAAAGATGTTTTGAGATGTGGATTGCACATTAAGGAGCAACTGGGAAGTTGAACAGATG
AAAATAATTGGTGACATGGAAAGCAGATTGTTTTATTCTTGGTTTAGTTACACTCTAATTAGAGAAACATTTT
TTGTGGTCATTCTACAGTGTGTTTTATTGGTCCTGTGCTTTCCGGAGGTTAATAGTTATCTTAATCCTGCCATCCC
TTTTGTGAGGTTTGAAGCTTGACATGGAAAAATAGTCTTAATCGATATTGATTTTTTTATTTTAAATCATTATATAA
ATTTCTTAGTAATGCTTACTATTCAATAGCATGTGTCTTCTGAGAGTTCCATATAGTCCAGTAGTACATTATAA
TACACACAAATTAATACATATTTAGATTGCATTCAAGCTACCTATACTAGGGAAGCATTCTCTGGTTTTCACTAT
TGGCAGTTTTAAAAAATTGTTCTTCACATTTGGAGATGACAGAATTGACTTGCCATAAGTAAAGGGTTGATGATAG
ATTTATGCCAAATCCTCCATATCCCGTGGCTGGACCCATGTGAATAGTGGCTCGCACGAGCACTGTCTGGTAGCT
CTCTAGCTGGCTGGAGTGTAGGATTGCGTTGTTAAGTTATGGAGGGAAAAAGTCATTATGGGATTGATTCTTTG
AGGATTGATATTTCTTCTTAAAGGATTCAATCCCATAATTATGACCATCAGCTCTCATGATTACCTAACAGTT
AATCAAACCAACCATAGTACTAGTTACTTTTTAGAGCCAGTATTAATCCTAAAGTAGATAAGTGTAGATTTGGT
TAAGTGTCTTTAAACATAGTGAATTTCCATTCTATTAAATAGAACTTGAGAAATGTGAGTTATATAAAAGTTA
TGTGTAAGTGAATATATTCTATGATAAATACCTAAACTTGAAGCAAAATCTCCTGTCAAGGGTTTGTGTGTGTG
TGTGTGTTTAACTTTCTTATCTATAGATTATTTTGTAGAAATTCATAGGTTTTCACTTATACATTTTGTAGCTT
GTGGACATATGGAGATGTGTGTTCACTCTAAATGAGTGCCTACTATGTGCTGGGCTCGAGGAATACAAAGGTA
GACAATATAGATTTTGTCTTTGCCCTCTGTGGTGGTTGACAATGTTAGCTTAATCTGGAGTATTCTTGAGGAGCC
TTTTGCTCATAGGCTTTAATTTTGTCTGTGACTTTTGCCAGGCTTTGGGGAAATTGACTGCCTTCACTCTTCCCT
GAAACTTTGAAGTCCACATAAGGGCTTTCTCATCAGATGGCAGAAATTATAATTTATTAACCTAAACAACCTTAC
AGTGTTCGCTTTGAATTGTATGAATCTTAGAACTGAGAAGCTAAACAACAGTGATAACAATTTTACATTATC

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FIGURE 3878B

TTTTCTTTCTCCTTTTGTCTCTAAAGGCTCCCAGGCCCTCCAGTCAAAATTTTCGTTATTTTTAGTCATGT
CACCATGATGTGAGATTTCTGAGCTCTGTTAGATACATTTAGAAATGTCCCTATTTATCAAATGGTGTGTTTGTAC
CCCATAAGTTATCCCTTATGCCCTGTGACTTCTGTGAAATCTTTGTTTTAAGTGCCAGTAACAAATTTTAGACC
ATCTAGATGAGGGTAGAGAGAGCTTATGCATTGTTTTATACATCACTGTTGATCTATACAAGATTTGAGTTATC
AGAAGGGTTTTGCTTTTATTTGCATATGAAATTTTATTAACATGAATATGGGCACAGAGCAAATAGCTTCTTAG
ACTGCTGCCCTCTGAAGGTGGCTTCTGTATCTTCTCAGAGGAGGAGGAATAGACTTAAACGACTTCTTTGTCTT
CCTTCAATTTTTTTTTTAATGAAAAAGTATACTAGGGCTTAGGCATGTGTGATTTACAGTTATTTGTTCTGAAGG
CTGCAGAGAATTGAAATCCAGCAGGCTATTTGTGTATGAAATCATGAGCATCGATAACGTGGATAACGTAGTTC
CATGTTGGCAGAACTTGACACTTGTCTATAAGTGCTTCCCAAGCCTCCTGAAAACTGAAGACATTTACATTAGG
CTTTTCAGTATAATTTAATTTAGGATAGGTTTTTATGCAATGTATCTGGGATTGAGTTTTGCTATTGTGTTTTG
ACACTTTAAGAGTTCTTGATGTTTACATAATAAGACTTCTTATGTGACTTAGCTGCTGTTTTAAGGAGAGCCAA
GACGTTTTGTTAGGAATTCCTAATTTTAGCTTAGTGTAGGTTTGGACATTTAAGGTGTAGTGTAAATAGGAAA
CATTAGTATTTTCATCTTAGTTTCTTGTGGTTTTGTGATTTTGTGATTTAATAACCAAAGGAACATTCCCCAT
TAAATCAGTAAGAGTAAATTTTTCAAACCTGGGGAAAAACGCATTTTAGGTTTTTAAAGAAAAATTATTTTAAAA
TGTGACTTAGAAATAACCATACTAATTACATTAGGCATTTGGGGTGATCATGGAAAATTATAAAATATTTTTAGC
ACTTAGTCCTTTTCTGTTAATGCAGTTTTACTTTTAAAGAAAGTAAATTTATTCTGGAAAATATGAATTACAG
CGCTAAACCTGGTTTTGTGTGTGTGAATATATTATATGGTAACCTTTTGTAATGTTACTCTACATGAAGATTT
CACTTTGGCCAGTCATTGGTATATATCACTACAACTTAATTTTATTATGGAAATAAGAACCTCTCATTGGATG
ACTATTCAAATTTCAAAGCAGACTTCTTGAATTGTTTACGTAACCTTTTGCTGAAGGATTTAGACTGCTTTCTAA
TAGTGAAACTAATATATATGGTGGCCAGAGTGTAATATATGCTAATACTTTGGCATGGGAGATATTTATCATGAG
TTTTACTATTAAAAATGTTATACATTTGCCTACGAGTTTTATAAATGATGTTGCCTTCAGAATTTGTGTGAAG
GTACAAAACATAAAATATCATGTATCTGATGTGCAATGGAAAGTCTTGTGCATCATTAGATATGAGTTCTTGATTA
TATTCGAATATTGATGATTAGAAAAATCTTATGTTCTGTGCTCTTAACAACAGACCCACACACAACAAAAAGC
ATGCTATTTGAGTAACTCTTACGACTTACAAGGCTGAGGGCTGTGGTGTGCATTATTCTTTAGGGTCTTCCACCA
GCAGTGCCCTCCTATTAACCTGTGACAAACAAGTCTCTCAATGTTAAAGAACTGGACATGTGTTTTTATGTTTTT
TGTTAGGAATCAGAAAGTATAATAATATGCTTGGTTTTCTTTTCCCTATAGTAACATTTTACAAAAGAGCTGCTAG
GCAGGTATTTTATTCTCAAAGTGATCTCAAACCTGGATGTAAATTTTAAATTATTTTTTAAATAGTAGTATAAGA
ATTCTGGCTGCTATTAGTTATTGTTTGTGTTTTCTGGGTAGAAGCTATTCGAAAAGTCCAGTTTCTGTCCCAGTGT
AGCAAAATGTAGTTCCCTCGGTTGTTTTCTTTAAATGCTTTATAATTTTACACTACCTTTTTAATATACAAACCT
CATTCTTCATTGGATAACTTGAAGGCTTTGATTTCTTTAAAAATTTAAATTTTAGTGTGTATATTACTTTGACAG
TTCCCTCATCTTTGAGATGCACGTGATCACTGTGCTTGAAAAAGACAATACTGAAGATTGTACTATGAAGTTTATT
GAATAATTTTCATAAATTTTATCCAAATGAGAGATTTTAGATTTTGTATTCTGCTTAGTTTTAAAAAATAA
AAATAGTAGTTTAAAGAGAGGCTAGTAAGTTTGATGCTATTCTTGCCAAACAACTCAGCCAAAATCTTTAAAG
TAACAAGAGGGAAAAAGGATGACTAATCGTTCTGCTTCTGAGTACATTTTCCAAAACGTTGGAAAGAACTTCTGA
ATTGAAATCTTGAATGTATTGAATCTGTCAAGGTACACAGCGGTGCCCTTTGTAAATGTTCACTTTTATTTAAT
CAGGTGATAAGTGGTGAATGTAGCAGAGCTTAAGAATAGAACTCAATTATCACTTTTTGTGAACAAGTTGGAAT
TGTGATGTTACTGTGTAATTGATTTGCTTTACAATGAACAATAAATTTAATAAAAT

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FIGURE 3879

MSTGFSFGSGTLGSTTVAAGGTSTGGVFSFGTGASSNPSVGLNFGNLGSTSTPATTSA PSSGFGTGLFGSKPATG
FTLGGTNTGIATTTITGLTLGTPATTSAATTGFSLGFNKPAASATPFALPITSTSASGLTLSSALTSTPAASTGF
TLNNLGGTTATTTTASTGLSLGGALAGLGGSLFQSTNTGTSGLGQNALGLTLGTTAATSTAGNEGLGGIDFSSSS
DKKSDKTGTRPEDSKALKDENLPPVICQDVENLQKFVKEQKQVQEEISRMSSKAMLKVQEDIKALKQLLSLAANG
IQRNTLNIDKLKIETAQELKNAEIALRTQKTPPGLQHEYAAPADYFRILVQQFEVQLQQYRQQIEELENHLATQA
NNSHITPDLSMAMQKIYQTFVALAAQLQSIHENVKVLKEQYLG YRKMFLGDAVDVFETRRAEAKKWQNTPRVTT
GPTPFSTMPNAAAVAMAATLTQQQPATGLNAFKL

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FIGURE 3880

ATGGCTGTTGGCAAGAACAAACGCCTTACGAAAGGAGGCCAAAAAGGGAGCCAAGAAGAAAGTGGTTGATCCATTT
TCTAAGAAAGAGTGGTATGATGTGAAAGCACCTTCTGTGTTCAATATAAGGAATATTGGAAAGATGCTAGTCACC
AGGACCCAAGGAAACAAAATTGCATCTGATGGCCTCAAGGGTCATGTGTTTGAACACCAACAGGTCCGCCAAATC
CGGAAGAATATGATGGAAATCAAGACCCGGGAGGTGCAGAAAAATGACTTGAAAGAAGTGGTCAATAAATTGATT
CCAGACAGCATTGGAAAAGACATAGAAAAGACTTGCCAATCCATTTATCCTCTCCATGATGTCTTCGTTAGAAAA
GTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAAACATCATGGAGCTTCATGGTGAAGGCAGTAGTTCTGGA
AAAGCCACTGGGAGCAAGACAGGTGCTAAAGTTGAATGA

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FIGURE 3881A

GCGGCCGCGGCGGCGGGACCATGGAGCTCAGAGCGCAGCCCCGGCGCCGGCGGGGACCGCGGACCGTTTTA
GTTTTGATTGCTGTTAACTACTACTGATAACTGAGCCAAAGTGGTGATGCTACTTGAGGGGAATTTCTGCAACCC
ATAGTCAACGATTACATGATTGTGAACCATGCTTTAGTGAAGAGGAACATTGAGCCCCGGCAGTTGTGCCGGGG
AGCTCTGCTGAAGGGATTACCAGCGAACTTGAATGTGTAACCAATAGTACTCTTGCCGCTATCATACGCCAGCT
GAGCAGTCTGAGCAAACATGCTGAAGACATATTTGGTGAGTTGTTAATGAGGCTAACAACCTTCTACATCAGAGC
AAATTCTCTTCAAGACAGAAATTGATCGCCTTGCTGTCAAAGTCACCCAGCTGGATTCAACAGTGGAAGAGGTCTC
ACTACAGGATATCAACATGAAAAAGCTTTCAAAGTTCCACAGTCCAAGACCAGCAAGTGGTTTTCAAAGAACAG
CATTCCTAATCCTGTTGCTGATATTTACAACCAGAGTGATAAGCCACCGCCTCTGAACATCCTGACACCATAACAG
AGATGACAAGAAGGATGGGCTGAAGTTCTATACTGATCCTTCTATTTCTTTGACCTCTGGAAAGAAAAATGCT
ACAGGACACAGAAGACAAAAGGAAAGAGAAAAGGCGTCAAAAGGAGCAAAAGCGTATAGATGGCACCACCCGTGA
GGTGA AAAAGGTTAGAAAAGCCAGAAACAGGCCAGGAGTGGAATATGATGGCATATGACAAAGAGCTTAGACC
CGACAACAGGTTGTCTCAGAGTGTGTACCATGGAGCGTCTTCCGAGGGATCCCTGTCCCCAGATACTAGGTACA
TGCATCGGACGTTACGGATTACTCTTACCCGGCTACTCCCAACCAATTCTCTGCACCCCCAGCCTGTGACCCCTTC
CTATGCAGCTGGTGACGTGCCACCACACGGGCTGCAAGCCAGGCTGCGGAGCATGAGTACCGGCCCCCATCTGC
CTCGGCGAGGCACATGGCCCTCAACAGACCTCAGCAGCCGCCCCCCCCCCGCTCCCCCTCAGGCCCCAGAGGGGT
CCAGGCCTCTGCACCGATGGCTCCAGCAGACTACGGGATGCTCCCAGCGCAGATAATTGAGTATTACAACCCATC
CGGACCACCTCCTCCGCCACCTCCTCCTGTGATTCCCTCAGCACAAACTGCCTTCGTGAGCCCTCTCCAGATGCC
CATGCAGCCCCCGTTCCCTGCATCAGCCAGCTCCACGCACGCAGCTCCTCCTCACCCACCTCCACCGGGCTCCT
GGTCACAGCCCCGCCACCCCCGGGCCCCACCCTCCCCGCCAGGCCCTCCTGGTCCCGGTCTTCTCTTTCTGTC
CTCCCCAATGCATGGCCCCCAGTAGCTGAGGCGAAGCGGCAAGAGCCTGCACAGCCACCAATCAGTGATGCTCG
AAGCGACCTCCTCGCTGCTATTTCGAATGGGAATTCAACTGAAAAAGGTGCAGGAGCAGCGGGAGCAGGAGGCCAA
GCGGGAGCCAGTGGGGAATGACGTGGCCACGATCCTGTCCCGGCGCATTGCCGTGGAGTACAGCGACTCTGACGA
CGACTCAGAGTTGCAGGAGAAAGGACTGGTCCGACTGAGCAAAAGGCCGGCGGAGAGGCCGCGTGTGGGAGCGTGT
GAAGATTTTAAGTGGTCTCTACACCCAAATAGTGGTATTCTAATCCCGTAGCATAGCACCTTTTGTATAAACAAT
GTGATATTGCTTCTGCACATCCAAAAATTCTGGGTCTTTTTCAGTATTTACTGTGTAATACTTAAGTGCCACTAAA
CATAGCAAAATTGTGCTGCACATGAGGAAATAGGCTGTCACTATCACATTGTCTCTGAAAACAGCATCTGCTTTTCT
CTTGCCCATGAGAGTATTTAGTGCAGTTTGGGTTTACTCTTACTGATCAATATAACTCTGCAGACTTGCTGTGTG
TTTGTGAAGCTGCCTGGTGTAGGTCTCTGCAAGACTAATGACTATGTGAGAGTGATGCTTCCAACCAAGTAAGT
GATATTGTTTACCCTTTGGTTTTTCTTTTGTAAAAAGGATGTGTTTCTGAATAAGTTGGTTTTAGAGG
GAAAGGTTCAACAAACAGGGAGAATCCAGTGTTCTGCTTTTCAGTTTCTTGGCTTGGTAGCCTCTGAGTGAATCT
GATGCTCTGCTGAATAATTTTCAATACCTCTGCACATGCCTGTCAAATATGAAATTGGAAGGGCCCTTTTCAGGCT
GGGTTCCCTGTGGGCATTTGCTTAGTAAATGCCTGTTGATGGTTTTTGCAAGAGAATTACAGACTCAACAGTAA
TGAAAGTGAAAGACAGAGTCCATTTTCTTCTGGGCGCATTGGGGATGACACTCAAGATACTTGCCAGTCTCTC
CAGTGTGGGCACAGGCCGCGCAGAACAGATGCGAGCAGTCCATGACTCTGGGAGCTACACCGCTGAGCTGGGCAG
AGCTGCGGCACAGGGCCTGGGCTGCAAAGGAGCCCTGCTCCTTTAGTTTCTTGACACCTGTGTCTGAGTGAGCC
GCAGGAGTTCTTAGCTCCTCAGCGAGCAACAGAGAGCACTTTAGATGGCACCTTTTACCACCTTGGTCAGAAATTT
AAAAGCTTAGGTTTAGGTGAAAGTAGATATTGACAGCATATTCACCTTTTACGGTGCTGGGGCCAGATTAGGGATC
ACTCCCGTGAGGAGGGCCTTACCCCTGTTCTAGAAGCAGCATGGTTGTCTCCTGTTGTTGGCACATTAAATGATA
AAAAGCACCTCATGAGATTCCCTTGATCAGCCCTGCAGCTGTAGTACAGTGCTGTGCCCTCACCTCCACCCTTCC
TGTTGTTCCACGTGGGCAATACCAGGGACCCATGGGGAAACTCAAGAATGACAGCTTCTATATTTTGTAAATCT
GGATGAAAGATAACTGTGTTGAACAAACAGGTGCTCCAGGCTTTGATTATAGATACGACTTCAAAAATATGCTAA
GACGCTTGACTTATTAAGGACTTTAACCTACTCAACAGTATTTTCATATCCATTGTGGTTAGTTACTCAGTTATGT
TGAGAAGAACTGGAGCTAAAAGCAGAGATGTTTGGGTGACGGTAGGAATGTGAGCAGGATGGTGATGGGGGT
TTTGTAAAAATGCATCTGAGCAAGTCAGCCAGCCCCGAAGTCCCCCTCAGTGTGTGTGTCTCAGTGGCTACCTGT
TGGGCTTGTGGGCAGTGATTGTACAGACCTGTCCATTGGGTGAGTCATGTAGATCTGAAGCCCTGAAAAGCCT
CATGTCTGCATCCCCCTTTCCAAGGCTGCTTCCCTGGTGTGTGTCTGTTCTCTCCTCTGTCCAGGTGCTGGGAGCGT
CCTCTTCAGCGTCTTTTCTTAGAGCTGGTCAACACTAGGCTGTCACTATAAATTCCTTGAATATAAGTAACAGTT
ATTAATGAACCTTCTAAATTTCTAATTTCTCTCTCTCTCTCTTTTTTTTTTTTTTTTGTGTTGTTGTTAAAAAGGCCCTA

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FIGURE 3881B

CTACATTGGCGCTATTCTTAGGACTTCTGCAACTTTTAAAGTCTTACTTGTCTTTCTTGTTGCTTTTGTATTAGG
AGTTCCCCGTGTGGGTCTAGAACTCCCCTTTGGTAATGCTTCTTTGTTTTTTATGGCCCTTCTGTTCTCAGGAT
GGAGAGAACACAGAAGCTACTATCCATGTCAGGATTTATTCATTTATATCTTATTACAATAAAATTAGTGGCAC
TTTATTCATAAATATTCATGAGCCTGTTAATTGTTAGTTGCTTCCCTGTAGCTGAATCAACAAGTTATTTTCAAC
TCAATTTTATGACTTGCAGAAAAGCTTTTGGCCCTGTTGTGTACCATAACATTTAAAAGAATGGAAAATGACTGAA
ATCCAATTTAGATTATTTTTAGAGTATTTTTCCAGCAAATTCATTTATTCGAAATTTAAATCCAGATCTTTTC
TAATATGGTATTACAATGAAAAGAATAAAGAGAAGATTTGAATTTTCAGTTTCATTTTCAAAAACATTTTACCAA
AACAAATGGAGAAGAAACATCCAAAAGCACATTTCAATTTCTCCAAACTTTGTGTTTTAAATTATAGTTATAAATT
GTAAGGTAATTTTAAATTGTCCCTCGTATTATTTCTCCACGTCIGTTTTAGTTTAAATGTCTCCTAAGCTTTTCTC
TCATAGCGTAGACCTAGGGAAGGGATGGGAAGATTGCCCAGTCCCCGATGGCTGCGCACACAGGAGGCGGCGGAG
CACAAGGCAAGTGAGTTTGCACGTGTCAGCCCCAGACCGTAAGCTTGGCTACACTGATGTTTTTCTTTACTAAGGA
TACTATTCAAAAATTAACATTTTCATCTCAGTAAGTTTTTAGAACATCAAAATGTTTTCTGAGCTCCAAGTGGCT
AGGTTGTAAAAGTTTTATAATAATTTGCAATTTAAATACATGATACATATTAATCCATTAAAGACTAGTGGGAAT
GTATCAGCCAGAGTAGCAAGTAATTTTGTGTTTTATAAATCATAGTATCTGTCATCTTGACAGTATTACCAATGCTG
TTGTAAATTGAATTTAAAGTGGTATTAAAAAACTGTAAACAATTTTATCTGTTTGTATATCTTACTATAGA
TTATGTACAAGTAACATCTAAATAAAATTACACTTTTAACCCCT

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FIGURE 3882

MPLVKRNI EPRHLCRGALPEGITSELECVTNSTLAAIIRQLSSL SKHAEDIFGELFNEANNFYIRANSLQDRIDR
LAVKVTQLDSTVEEVSLQDINMKKAFKSSTVQDQQVSKNSIPNPVADIYNQSDKPPPLNILTPYRDDKKDGLKF
YTDPSYFFDLWKEKMLQDTE DKRKEKRRQKEQKRIDGTTREVKKVRKARNRRQEWNMAYDKELRPDNRLSQSVY
HGASSEGLSPDTRSHASDVTDYSYPATPNHSLHPQPVTPSYAAGDVPPHGPASQAAEHEYRPPSASARHMALNR
PQQPPPPPPPPQAPEGSQASAPMAPADYGMLPAQII EYYNPSGPPPPPPPPVIPSAQTAFVSPLQMMPQPPFPASA
SSTHAAPPHPSTGLLV TAPPPPGPPPPPPPGPPGSSLS SSPMHGPPVAEAKRQEPAQPPISDARSDLLAAIRM
GIQLKKVQE QREQEAKREPVGNDVATILSRRIAVEYSDSDDDSEFDENDWSD

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FIGURE 3883

ATGCGCGATCTCCCGGAGCATGCGCAGCAGCGGCGCCGACGCGGGCGGGTGCCTGGTGACCGCGCGCGCTCCCGG
AAGTGTGCCGGCGTCGCGCGAAGGTTTCAGCAGGGAGCCGTGGGCCGGGCGCGCCGGTTCCCGGCACGTGTCTCGG
CACGTGGCAGCGCGCCTGGCCCTGGGCTTGAGGGCGCCGGCGCCCTGGATCCGCCGGCCGTGGTTCGCCGAGTCGG
TGTCGTCTTTGACCATCGCCGACGCGTTCATTGCAGCCGGCGAGAGCTCAGCTCCGACCCCGCCGCGCCCCGCGC
TTCCCAGGAGGTTTCATCTGCTCCTTCCCTGACTGCAGCGCCAATTACAGCAAAGCCTGGAAGCTTGACGCGCACC
TGTGCAAGCACACGGGGGAGAGACCATTGTTTGTGACTATGAAGGGTGTGGCAAGGCCTTCATCAGGGACTACC
ATCTGAGCCGCCACATTCTGACTCACACAGGAGAAAAGCCGTTTGTGTTGTGCAGCCAATGGCTGTGATCAAAAAT
TCAACACAAAATCAAACCTGAAGAAACATTTTGAACGCAAACATGAAAATCAACAAAAACAATATATATGCAGTT
TTGAAGACTGTAAGAAGACCTTTAAGAAACATCAGCAGCTGAAAATCCATCAGTGCCAGCATACCAATGAACCTC
TATTCAGCTATGTATGTCAAAAAGGATGTTCTTTGTGGCAAAAACATGGACGGAACCTTCTGAAACATGTGAGA
GAAACCCATAAAGAGGAAATACTATGTGAAGTATGCCGGAACATTTAAACGCAAAGATTACCTTAAGCAACAC
ATGAAAACCTCATGCCCCAGAAAGGGATGTATGTCGCTGTCCAAGAGAAGGCTGTGGAAGAACCTATACAACTGTG
TTTAATCTCCAAAGCCATATCCTCTCCTTCCATGAGGAAAAGCCGCCCTTTTGTGTGTGAACATGCTGGCTGTGGC
AAAACATTTGCAATGAAACAAAGTCTCACTAGGCATGCTGTTGTACATGATCCTGACAAGAAGAAAATGAAGCTC
AAAGTCAAAAAATCTCGTGAAAAACGGAGTTTGGCCTCTCATCTCAGTGGATATATCCCTCCCAAAAGGAAACAA
GGGCAAGGCTTATCTTTGTGTCAAAACGGAGAGTCACCCAACTGTGTGGAAGACAAGATGCTCTCGACAGTTGCA
GTACTTACCCTTGGCTAAGAACTGCACTGCTTTGTTTAAAGGACTGCAGACCAAGGAGCGAGCTTTCTCTCAGAG
CATGCTTTTCTTTATTAAATTACTGATGCAG

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FIGURE 3884

GGGGGGAAACGGAAGTGAGCGGCGGGGTCGACTGACGGTAACGGGGCAGAGAGGCTGTTGCGAGAGCTGCGGAAG
ATGAATGCCAGAGGACTTGGATCTGAGCTAAAGGACAGTATTCCAGTTACTGAACTTTTCAGCAAGTGGACCTTTT
GAAAGTCATGATCTTCTTCGGAAGGTTTTCTTGTGTGAAAAATGAACTTTTGCCTAGTCATCCCCTTGAATTA
TCAGAAAAAATTTCCAGCTCAACCAAGATAAAATGAATTTTTCCACACTGAGAAACATTTCAGGGTCTATTTGCT
CCGCTAAAATTACAGATGGAATTCAAGGCAGTGCAGCAGGTTTCAGCGTCTTCCATTTCTTTCAAGCTCAAATCTT
TCACTGGATGTTTTGAGGGGTAATGATGAGACTATTGGATTTGAGGATATTCTTAATGATCCATCACAAAGCGAA
GTCATGGGAGAGCCACACTTGATGGTGAATATAAACTTGGTTTACTGTAATAGTGTGCTGTTTCATGGAAACCGA
GGGCTGCATCTTGTTTTATAGTCATCTTTGTACTGTAATTTGATGTACACAACATTAAAAGTACTGACACCTGAGA
ATTTCTGCTCAAGTAGTATCAGTGATCATTAAAAATTTGGAGGGGCTTTTGGTTTACAGCCATGTGACAATTAAA
AGCACTAAAGGGAGATCATGTTAAAGCTCTTAATTTATATTAACAGTAGCCTTTGTCTTTAAAAAAGTTGTTG
CTCATGAATATTATAAAATGATCTACAGGTTTCAATTCAACCTGTTTCTAGGTTTTTTTTGTAAATTTAGTTTTGA
TTAAGCATTATAAGCATTGAGTCTATAAACTTTATAGTAGCATCTTTCAGAATAAACATTTTTAATTGATTTCA
GTGGCAACTCTCAAATTGATTACAATATGAGATATATCAGTGTCGTCATTAACTCATAAGAATAATATTTAC
TGTGTCAGTGCTATTTTAGGATTATAGTTATTGTTTGATTATTTTCAGGTTGAAAAGTAGAAGTTCCAAGGTTTTG
ATTTTGGTCTGGTCTTTAAGTGAAAAATTAAAGCAACCAGTAGATGTAGGTTAACTTTTACTTCATAGACTTAA
TATGTGATTAATATATTGCCAAGCAACACTGTAAAGAAAAGTAAACTCATTTTTTCTTGTCTTAATTTATAT
ATTACAAGATACTGTAAGGTATTCTTTATGAAGTTGATATATAAAAAATTTACATTTTTTAGAACATTAGTGAATGG
ATCATCTTTTACAATTAAAAGTATATTTTGATTATCAGTTTCTTAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

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FIGURE 3885

MNARGLGSELKDSIPVTELSASGPFESHDLRLKGFSCVKNELLPSHPLELSEKNFQLNQDKMNFSTLRNIQGLFA
PLKLQMEFKAVQQVQRLPFLSSSNLSLDVLRGNDETIGFEDI LNDPSQSEVMGEPHLMVEYKLGLL

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FIGURE 3886

ACACTGATGATGTTTTAGCCAGGGTGCCGTTCTTTTCACTATTGTGCCATTCTCIGTTCTACGGTCCATGTTG
TCAAAAGTGGTTCGTTGCGACTGAACAAGGTACCCTGTTTGCTTGTATTGCTTTCTTAGAAACACTTGGAGGAGTC
ACTGCAGTTTCTACTTTTAATGGAATTTACTCAGCCACTGTTGCTTGGTACCCTGGCTTCACTTTCCTGCTGTCT
GCTGGTCTGTTACTACTTCCAGCCATCAGTCTATGTGTTGTCAAGTGTACCAGCTGGAATGAGGGAAGCTATGAA
CTTCTTATACAAGAAGAATCCAGTGAAGATGCTTCAGACAGAGCCTGTTAAGCTGCTATTGATAGTCGGAGCTTA
TATACTGTGACTTCTGAAGACTATACATGAATTCCACAATCAGTGCTTTGTTGATACAAAATCCTTAAAAGGGAG
GCACCTTAAAGAATATGTATTTTCACTTTTCTTAATATGTTTCATCGGTGACAGGCATGATAATATTTCTATAT
GTAATGGGTAATTGGGAAAAAATAGATGATAAATAAAATTGCTCTAAAGAAGTT

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FIGURE 3887

GAGACAGCGCCGGGGCAAGTGAGAGCCGGACGGGCACTGGGCGACTCTGTGCCTCGCTGAGGAAAAATAACTAAA
CATGGGCAAAGGAGATCCTAAGAAGCCGAGAGGCAAAATGTCATCATATGCATTTTTTTGTGCAAACCTTGTCGGGA
GGAGCATAAGAAGAAGCACCAGATGCTTCAGTCAACTTCTCAGAGTTTTCTAAGAAGTGCTCAGAGAGGTGGAA
GACCATGTCTGTAAAGAGAAAGGAAAATTTGAAGATATGGCAAAGGCGGACAAGGCCCGTTATGAAAGAGAAAT
GAAAACCTATATCCCTCCCAAAGGGGAGACAAAAAAGAAGTTCAAGGATCCCAATGCACCCAAGAGGCCTCCTTC
GGCCTTCTTCTCTTCTGCTCTGAGTATCGCCCCAAAATCAAAGGAGAACATCCTGGCCTGTCCATTGGTGATGT
TGCGAAGAACTGGGAGAGATGTGGAATAACACTGCTGCAGATGACAAGCAGCCTTATGAAAAGAAGGCTGCGAA
GCTGAAGGAAAAATACGAAAAGGATATTGCTGCATATCGAGCTAAAGGAAAGCCTGATGCAGCAAAAAAGGGAGT
TGTC AAGGCTGAAAAAAGCAAGAAAAAGAAGGAAGAGGAGGAAGATGAGGAAGATGAAGAGGATGAGGAGGAGGA
GGAAGATGAAGAAGATGAAGATGAAGAAGAAGATGATGATGATGAATAAGTTGGTTCTAGCGCAGTTTTTTTTTTC
TTGTCTATAAAGCATTTAACCCCCCTGTACACAACCTCACTCCTTTTAAAGAAAAAAATTGAAATGTAAGGCTGTG
TAAGATTTGTTTTTAACTGTACAGTGTCTTTTTTTGTATAGTTAACACACTACCGAATGTGTCTTTAGATAGCC
CTGTCTGGTGGTATTTTCAATAGCCACTAACCTTGCCTGGTACAGTATGGGGGTTGTAAATTGGCATGGAAATT
TAAAGCAGGTTCTTGTGGTGACAGCACAAATTAGTTATATATGGGGATGGTAGTTTTTTTCATCTTCAGTTGTC
TCTGATGCAGCTTATACGAAATAATTGTTGTTCTGTAACTGAATACCACTCTGTAATTGCAAAAAAAAAAAAAAG
TTGCAGCTGTTTTGTTGACATTCTGAATGCTTCTAAGTAAATACAATTTTTTTTATTAAAAAAAAAAAAAAAAAAAA
AAAAAAA

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FIGURE 3888

MGKGDPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKFEDMAKADKARYEREM
KTYIPPKGETKKKFKDPNAPKRPPSAFFLFCSEYRPKIKGEHPGLSIGDVAKKLGEMWNNTAADDKQPYEKKA
LKEKYEKDIAAYRAKGPDAAKKGVVKAESKKKKKEEEDEEEDEEEDEEEDEEEDEEEDEEEDEEEDEEEDDDDE

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FIGURE 3889

CGGAGGTGAGGTTTGTACCGGATTCTGAGAGGTGGGCTTTTAGTCCCTCCAGACCTCGGCTTTAGTGCTGTCT
CCGCTTTTCTTTCACCTTCACAGAGGTTCTGTCTTCTCTAAAGAAGGTTTTATTGGGAGGTAAAGGTCAATGCG
TAGGGGTAGAGTAAGATGCTTTATGGTGAAATTGAAGGTAAATTCTTGGGACCTAGAGAAGAAGTAACGAGTGAG
CCACGCTGTAAAAAATTGAAGTCAACCACAGAGTCTGTATGTTTTTACAATCATAGTAATGCTGATTTTCACAGA
ATCCAAGAGAAAACCTGGAAATGATTGGGTCCCTGTGACCATCATTGATGTGAGAGGACATAGTTATTTGCAGGAG
AACAAAATCAA~~AA~~ACTACAGATTTGCATAGACCTTTGCATGATGAGATGCCTGGTAATAGACCAGATGTTATTGAA
TCCATTGATTCACAGGTTTTACAGGAAGCACGTCTCCATTAGTATCCGCAGACGATGAGATATATAGCACAAAGT
AAAGCATTTATAGGACCCATTTACAAACCCCTGAGAAAAAGAAACGTAATGAAGGGAGGAATGAGGCACATGTT
CTAAATGGTATAAATGACAGAGGAGGACAAAAAGAGAAACAGAAATTTAACTCTGAAAAATCAGAGATTGACAAT
GAATTATTCCAGTTTTACAAAGAAATTGAAGAGCTTGAAAAGGAAAAAGATGGTTTTGAGAACAGTTGTAAAGAA
TCTGAACCTTCTCAGGAACAATTTGTTCCATTTTATGAGGGTCATAATAATGGTCTCTTAAACCTGATGAAGAA
AAGAAAGATCTTAGTAATAAAGCTATGCCATCACATTGTGATTATCAGCAGAACTTGGGGAATGAGCCAGACAAA
TATCCCTGTAATGGACAAGTAATACCTACATTTTGTGACACTTCATTTACTTCTTTTCAGGCCTGAATGGCAGTCA
GTATATCCTTTTATAGTGCCCTATGGTCCCCCTCTTCCCAGTTTGAACATATCATTTAAACATTCAGAGATTGAGT
GGTCCACCAAATCCACCATCAAATATTTTCCAAGCCCCAAGATGACTCTCAGATACAAAATGGATATTATGTAAT
AATTGTGATGTTAACTGGAATTGCATGACTTTTGATCAGAACAATGAATATACTGACTGTAGTGAGAATAGGAGT
AGTGTTCATCCCTCTGGAAATGGCTGCAGTATGCAAGATCGATATGTGAGTAATGGTTTTCTGTGAAGTCAGAGAA
AGATGCTGGAAAGATCATTGTATGGACAAGCATAATGGAACAGACAGGTTTTGTGAACCAGCAGTTTCAAGAGGAA
AAGTTAAATAAATTGCAGAAGTTACTTATTCTTTTAAAGAGGTCTGCCTGGTTCTGGGAAAACAACATTGTCTCGA
ATTCTGCTTGGTCAGAATCGTGATGGCATTGTGTTTCAGCACTGATGACTATTTTACCATCAAGATGGGTACAGG
TATAATGTTAATCAACTTGGTGATGCCCATGACTGGAACCAGAACAGAGCAAAACAAGCTATCGATCAGGGAAGA
TCTCCAGTTATAATAGATAACACTAATATACAAGCTTGGGAAATGAAGCCATATGTGGAAGTGGCCATAGGAAAA
GGATACAGAGTAGAGTTTCATGAACCTGAAACTTGGTGGAATTTGATCCTGAAGAATTAGAAAAGAGGAATAAA
CATGGTGTGTCTCGAAAGAAGATTGCTCAGATGTTGGATCGTTATGAATATCAAATGTCCATTTCTATTGTAATG
AATTCAGTGGAACCATCACACAAAAGCACACAAAGACCTCCTCCTCCACAGGGGAGACAGAGGTGGGGAGGCTCT
CTTGGCTCACATAATCGTGTCTGTGTACAAATAATCATTTAAATTAGCTATTTTCAGCTAACACATTTGTTGTTG
CACTTGAAAAAGAGTTAGTGAGCCTGTCTTGGAGTTTAAAGTAGTTTCAAATAAAAAAAGGCTACAGTGCCTCACA
AAGGATGTTCCAGCAAGTTGTTTAAATTCCAGCAAGTTGTTAAAGTGTAATAAAAAATATATGAAATTGTATT
TTAAATGTTTTTATATTCTCTTGTGTAATACTCTTGGCTGTTATGGAAGCACCTGAGTAATAGAGTGGTGGGTA
GGAGCTAGGATGTTTTTCTACAATCGAATTTTAACTAATTTATCTATTTTATAGACACTATTGAACAGTTTTTT
AATAGTTTCATATCTAAATCTAACTTTTCATAAACTTTACGGTTTTTTCCTTCACTACCTTAAATATGCAAGAAAT
ACTGACTTGGTATAGGGTACCTTAGTTTTCTCTATTTCATTAGACAGGTAAAATTATATTTTACGCTGATTGATCTG
TGTGACAAAATTATTTCTTAGCTATAATCAGCACATCACTTAGTTCAAACAAAATTCCCCAGCAAATGTTAGATA
GTAGGTATATCAGTCACCTGGGGAGTTTTCTTCATAATATGCATATTCATCTTGTAAATGCATACATAGTTATCAT
CCTCCTTCTCAACCCATCTCCCTAACCCACATGCTTGCCAGTTCTTGAAGGGATAAAGTGATTCTAATAATGTT
TTACTTCTCTCTGTTCAATTTAATGTGATATAATTCTAGTATAAAAAATATTTTGGACAGTTGCTTAACATGGTCA
TAAGAGGATTTGTACTATAGAATATCTTCTAGTACTAATTTTTCTGTAGAGCAAATTATATTTCTCTCACTGGAT
AGTTTTTAGATGTGTTTCTTCATATAAAATTAAAACTGAGATGGAATTC

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FIGURE 3890

MSYGEIEGKFLGPREEVTSEPRCKKLKSTTESYVFHNHSNADFHRIQEKTGNDWVPVTIIDVRGHSYLQENKIKT
TDLHRPLHDEMPGNRPDVIESIDSQVLQEARPPLVSADDEIYSTSKAFIGPIYKPPEKKRNEGRNEAHVLNGIN
DRGGQKEKQKFNSEKSEIDNELFQFYKEIEELEKEKDGFESENCKESEPSQEQFVFPFYEGHNNGLLKPDEEKKDLS
NKAMPSHCDYQQNLGNEPDKYPCNGQVIPTFCDTSFTSFRPEWQSVYPFIVPYGPPLPSLNYHLNIQRFSGPPNP
PSNIFQAQDDSQIQNGYVNNCHVNWNCMTFDQNNNEYTDCSENRSSVHPSGNGCSMDRYVSNGFCEVRERCWKD
HCMDKHNGTDRFVNQQFQEEKLNKLQKLLILLRGLPGSGKTTLSRILLGQNRDGIVFSTDDYFHHQDGYRYNVNQ
LGDAHDWNQNRQAIDQGRSPVIIDNTNIQAWEMKPYVEVAIGKGYRVEFHEPETWWKFDPEELEKRNKHGVS
KKIAQMLDRYEYQMSISIVMNSVEPSHKSTQRPPPPQGRQRWGGSLGSHNRVCVTNNH

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FIGURE 3891

CGAGCTGCCATGAGCCTCTGGGTGGACAAGTATCGGCCCTGCTCCTTGGGACGGCTGGACTATCACAAGGAGCAG
GCGGCCCAGCTGCGGAACCTGGTGCAGTGTGGTGACTTTCCTCATCTGTTAGTGTACGGACCATCAGGTGCTGGA
AAAAAGACAAGAATTATGTGTATTTACGTGAACCTTTATGGTGTGGAGTGGAAAAATTGAGAATTGAACATCAG
ACCATCACAACCTCCATCTAAAAAATAATTGAAATTAGCACCATTGCAAGTAACCTACCACCTTGAAGTTAATCCT
AGTGATGCTGGAAATAGTGACCGAGTAGTCATTGAGGAGATGTTGAAAACAGTGGCACAATCACAACAACCTTGAA
ACAACTCTCAAAGGGATTTTAAAGTGGTATTATTGACAGAAGTTGACAACTCACCAGATGCTCAGCATGCC
TTGCGAAGAACCATGGAAAAATATATGTCTACCTGCAGATTGATCTTGTGCTGCAATTCTACATCTAAAGTGATC
CCACCTATTTCGTAGTAGGTGCTTGGCGGTTTCGTGTGCCTGCTCCCAGCATTGAAGATATTTGCCACGTGTTATCT
ACTGTGTGTAAGAAGGAAGGTCTGAATCTTCCTTCACAACCTGGCTCATAGACTTGCAGAGAAGTCTTGTAGAAAT
CTCAGAAAAGCCCTGCTTATGTGTGAAGCCTGCAGAGTGCAACAATATCCTTTTACTGCAGATCAAGAAATCCCT
GAGACAGATTGGGAGGTGTATCTGAGGGAGACTGCAAATGCTATTGTGTCAGTCAGCAAACCTCCACAAAGGCTCCTT
GAAGTTCGTGGAAGGCTGTATGAGCTTCTAACTCATTGTATTCTCCTGAGATAATAATGAAGGGCCTTCTCTCA
GAACTGTTACATAATTGTGATGGACAACCTGAAAGGGGAGGTGGCACAATGGCAGCTTACTATGAGCATCGTCTA
CAGCTGGGTAGCAAAGCCATTTATCACTTGGAAAGCGTTTGTGGCCAAATTCATGGCACTTTATAAGAAGTTCATG
GAGGATGGATTGGAAGGCATGATGTTCTTGACTTCTGTGTCAGTTATTCTTGCAAAGATTTCTCAGTATCAGTATTTA
CATACAGCTTATATTAAGAGCTGTGGGTAAATTAACCTGAACCTTAATCATGTCGTATTTGGGTTTTTTTGGTAA
TAACCTTCTGTGAACTATTAATCATCCTCTGAGTTAAATAATTGCTCCTATACTATTGAAGTATGTAGTTTTGT
ACATAACTTAGAGACTTTAGAGTCTAAGAAAATGATCTTAATTTACTTTAAGCATTGGTTATTCAAGTATTCATT
GTTGATCCTCCTATTCTCTTCCGTCTAATCTCTCACCTGCTAAAGGAGATTTACACATTAGAAAGCAAAGATTAT
TTTCATTTATCCAGATGACCATTTTCTGCCACAGGTAACATGATTGTTTGACGG

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FIGURE 3892

MSLWVDKYRPCSLGRLDYHKEQAAQLRNLVQCGDFPHLLVYGPSGAGKKTRIMCILRELYGVGVEKLRIEHQTIT
TPSKKKIEISTIASNYHLEVNPSDAGNSDRVVIQEMLKTVAQSQQLETNSQRDFKVLLTEVDKLTQDAQHALRR
TMEKYMSTCRLLCCNSTSKVIPP IRSRCLAVRVPAPSI EDICHVLSTVCKKEGLNLP SQLAHLAEKSCRNLRK
ALLMCEACRVQQYPFTADQEIPETDWEVYLRETANAIVSQQTPQRLLEVGRRLYELLTHCIPPEIIMKGLLSELL
HNCDGQLKGEVAQMAAYYEHRLQLGSKAIYHLEAFVAKFMALYKKFMEDGLEGMMF

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FIGURE 3893

GGGCGGGAAGATGGCGGCTGGGTTCAAACCGTGGAACCTCTGGAGTATTACAGGAGATTTCTGAAAGAGAAGCTG
CCGTCCCTGATGGAAGAGAACTTGGTGAATTGAGAACCACTGTCAACATCGGTTCAATTAGTACCGCAGATGG
TTCTGCTTTAGTGAAGTTGGGAAATACTACAGTAATCTGTGGAGTTAAAGCAGAATTTGCAGCACCATCAACAGA
TGCCCCCTGATAAAGGATACGTTGTTCTAATGTGGATCTACCACCCCTGTGTTTCATCGAGATTCGGGCTCTGGACC
TCCTGGAGAAGAGGCCCAAGTGGCTAGCCAGTTCATTGCAGATGTGATTGAAAATTCACAGATAATTCAGAAAGA
GGACTTATGCATTTCTCCAGGAAAGCTTGTCTGGGTTCTATACTGTGATCTCATTGCTCGACTACGATGGAAA
CATTTTGGATGCCTGCACATTTGCTTTGCTAGCGGCTTTAAAAAATGTACAGTTGCCTGAAGTTACTATAAATGA
AGAACTGCTTTAGCAGAAGTTAATTTAAAGAAGAAAAGTTATTTGAATATTAGAACTCATCCAGTTGCAACTTC
CTTTGCTGTGTTTGATGACACTTTGCTTATAGTTGACCCTACTGGAGAGGAGGAACATCTGGCAACAGGAACCTT
AACAAATAGTAATGGATGAGGAAGGCAAACTCTGTTGTCTTCACAAACCAGGCATGTTCCCGCCACTTCAGTCCTA
AACATATGTAGATGAAAACCTCAGTGTGAGCCTTAAATTAGGGAGGGCCAAATAGAATATGG

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FIGURE 3894

MAAGFKTVEPLEYYRRFLKENCRPDGRELGEFRITTTVNIGSISTADGSALVKLGNTTVICGVKAEFAAPSTDAPD
KGYVVPNVLDLPPLCSSRFRSGPPGEEAQVASQFIADVIENSQIIQKEDLCISPGKLVWVLYCDLICLDYDGNILD
ACTFALLAALKNVQLPEVTINEETALAEVNLKKKSYLNIRTHPVATSFVFDLTLIVDPTGEEHLATGTLTIV
MDEEGKLCCLHKPGGSGLTGAKLQDCMSRAVTRHKEVKKLMDEVIKSMKPK

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FIGURE 3895

AGAGACTCAAGATGATTCCCTTTTTACCCATGTTTTCTCTACTATTGCTGCTTATTGTTAACCCCTATAAACGCCA
ACAATCATTATGACAAGATCTTGGCTCATAGTCGTATCAGGGGTCGGGACCAAGGCCCAAATGTCTGTGCCCTTC
AACAGATTTTGGGCACCAAAAAGAAATACTTCAGCACTTGTAAGAAGTGGTATAAAAAGTCCATCTGTGGACAGA
AAACGACTGTGTTATATGAATGTTGCCCTGGTTATATGAGAATGGAAGGAATGAAAGGCTGCCAGCAGTTTTGC
CCATTGACCATGTTTATGGCACTCTGGGCATCGTGGGAGCCACCACAACGCAGCGCTATTCTGACGCCTCAAAAC
TGAGGGAGGAGATCGAGGGAAAGGGATCCTTCACCTTACTTTGCACCGAGTAATGAGGCTTGGGACAACCTTGGATT
CTGATATCCGTAGAGGTTTGGAGAGCAACGTGAATGTTGAATTACTGAATGCTTTACATAGTCACATGATTAATA
AGAGAATGTTGACCAAGGACTTAAAAAATGGCATGATTATTCCCTTCAATGTATAACAATTTGGGGCTTTTCATTA
ACCATTATCCTAATGGGGTTGTCACGTGTTAATTGTGCTCGAATCATCCATGGGAACCAGATTGCAACAAATGGTG
TTGTCCATGTCATTGACCGTGTGCTTACACAAATTGGTACCTCAATTCAAGACTTCATTGAAGCAGAAGATGACC
TTTCATCTTTTAGAGCAGCTGCCATCACATCGGACATATTGGAGGCCCTTGGAAAGAGACGGTCACTTCACACTCT
TTGCTCCCAACATGAGGCTTTTGAGAACTTCCACGAGGTGTCCTAGAAAGGATCATGGGAGACAAAGTGGCTT
CCGAAGCTCTTATGAAGTACCACATCTTAAATACTCTCCAGTGTTCTGAGTCTATTATGGGAGGAGCAGTCTTTG
AGACGCTGGAAGGAAATACAATTGAGATAGGATGTGACGGTGACAGTATAACAGTAAATGGAATCAAAATGGTGA
ACAAAAAGGATATTGTGACAAATAATGGTGTGATCCATTTGATTGATCAGGTCTTAATTCCTGATTCTGCCAAC
AAGTTATTGAGCTGGCTGGAAACAGCAAACCACCTTCACGGATCTTGTGGCCCAATTAGGCTTGGCATCTGCTC
TGAGGCCAGATGGAGAATACACTTTGCTGGCACCTGTGAATAATGCATTTTCTGATGATACTCTCAGCATGGATC
AGCGCCTCCTTAAATTAATTCTGCAGAATCACATATTGAAAGTAAAGTTGGCCTTAATGAGCTTTACAACGGGC
AAATACTGGAACCATCGGAGGCAACAGCTCAGAGTCTTCGTATATCGTACAGCTGTCTGCATTGAAAATTCAT
GCATGGAGAAAAGGAGTAAGCAAGGGAGAAACGGTGCGATTACATATTCGCGAGATCATCAAGCCAGCAGAGA
AATCCCTCCATGAAAAGTTAAAAACAAGATAAGCGCTTTAGCACCTTCCTCAGCCTACTTGAAGCTGCAGACTTGA
AAGAGCTCCTGACACAACCTGGAGACTGGACATTATTTGTGCCAACCAATGATGCTTTTAAGGGAATGACTAGTG
AAGAAAAAGAAATTCTGATACGGGACAAAAATGCTCTTCAAAACATCATTCTTTATCACCTGACACCAGGAGTTT
TCATTGGAAGGATTTGAACCTGGTGTACTAACATTTTAAAGACCACACAAGGAAGCAAAATCTTTCTGAAAG
AAGTAAATGATACACTTCTGGTGAATGAATTGAAATCAAAAGAATCTGACATCATGACAACAAATGGTGAATTC
ATGTTGTAGATAAACTCCTCTATCCAGCAGACACACCTGTTGGAATGATCAACTGCTGGAATACTTAAATAAT
TAATCAAAATACATCCAAATTAAGTTTGTTCGTGGTAGCACCTTCAAAGAAATCCCCGTGACTGTCTATACAACTA
AAATTATAACCAAAGTTGTGGAACCAAAAATTAAGTGATTGAAGGCAGTCTTCAGCCTATTATCAAAACTGAAG
GACCCACACTAACAAAAGTCAAAATTGAAGGTGAACCTGAATTCAGACTGATTAAAGAAGGTGAACAATAACTG
AAGTGATCCATGGAGAGCCAATTATTAATAAATACACCAAAATCATTGATGGAGTGCCTGTGGAATAACTGAAA
AAGAGACACGAGAAGAACGAATCATTACAGGTCCTGAAATAAAATACACTAGGATTTCTACTGGAGGTGGAGAAA
CAGAAGAACTCTGAAGAAATTGTTACAAGAAGAGGTCACCAAGGTCACCAATTCATTGAAGGTGGTGATGGTC
ATTTATTTGAAGATGAAGAAATTAAGAGCTGCTTCAGGGAGACACACCCGTGAGGAAGTTGCAAGCCAACAAAA
AAGTTCAAGGATCTAGAAGACGATTAAGGGAAGGTCGTTCTCAGTGAAAATCCAAAAACCAGAAAAAATGTTTA
TACAACCTAAGTCAATAACCTGACCTTAGAAAAATTGTGAGAGCCAAGTTGACTTCAGGAACCTGAAACATCAGCA
CAAAGAAGCAATCATCAATAATTCTGAACACAAATTTAATATTTTTTTTTCTGAATGAGAAACATGAGGGAAT
TGTGGAGTTAGCCTCCTGTGGTAAAGGAATTGAAGAAAATATAACACCTTACACCTTTTTTCATCTTGACATTAA
AAGTTCTGGCTAATTTGGAATCCATTAGAGAAAAATCCTTGTACCAGATTCAATTACAATCAAATCGAAGAGT
TGTGAACCTGTTATCCCATTTGAAAAGACCGAGCCTTGTATGTATGTTATGGATACATAAAATGCACGCAAGCCATT
ATCTCTCCATGGGAAGCTAAGTTATAAAAAATAGGTGCTTGGTGTACAAAACCTTTTTATATCAAAGGCTTTGCAC
ATTTCTATATGAGTGGGTTTACTGGTAAATTATGTTATTTTTTACAACCTAATTTTGTACTCTCAGAAATGTTTGT
ATATGCTTCTTGAATGCATATTTTTTAATCTCAAACGTTTCAATAAAACCATTTTTCAGATATAAAGAGAATTA
CTTCAAATTGAGTAATTCAGAAAACTCAAGATTTAAGTTAAAAAGTGGTTTGGACTTGGGAA

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FIGURE 3896A

GCAGCCGCCACATTCAACAGGCAGCAGCGCAGCGGGCGCGCCGCTGGGGAGAGCAAGCGGCCCGCGGCGTCCGTC
CGTCCCTCCGTCCGCGGCCCTGTCAGCTGGAGCGCGGCGCAGGCTCTGCCCCGGCCCGCGGCTCTGGCCGGCCG
TCCAGTCCGTGCGGCGGACCCCGAGGAGCCTCGATGTGGATGGCCCCGCGAAGTTAAGTTCTGGGCTCGCGCTTC
CACTCCGCCCGCCTTCTCCAGTTTCCGTCCGCTCGCCGACCGGCTTCGTTCCCCCAAATCTCGGACCGTCC
CTTCGCGCCCCCTCCCCGTCCGCCCCAGTGCTGCGTTCTCCCCCTCTTGGCTCTCTGCGGCTGGGGGAGGGG
GGGGGTACCATGCGCGAGGCGCCTCAGGTGGTGGAGATCGACCCGGAATTCGAGCCGCTGCCCCGGCCGCGCTC
GTGCACCTGGCCGCTGCCAGGCCGAGTTTAGCCAGTCCAACCTCGGCCACCTCCAGCCCGGCGCCGTGGGGCAG
CGCGGCTGCCAACCCGACGCGCGGCGGGCCTGCCCTCGGCCCTCGGCTGCCGCTGTGAGCGCCGACTTCATGAG
CAACCTGAGCTTGCTGGAGGAGAGCGAGGACTTCCCGCAGGCGCCCGGCTCCGTGGCGGGCGGGGTGGCGGGCGG
GGCCGCCGCGGCCGCCACCGGGGGGCTGTGCGGGGACTTCCAGGGCCCGGAGGCGGGCTGCCTGCACCCAGCGCC
ACCGCAGCCCCCGCGCCCGGGCCGCTGTGCGAGCACCCGCCGGTCCCCCGCGCCGCTGGGCCGCTCGCGGG
GCAGCCGCGCAAGAGCAGCTCGTCCCGCCGCAACCGGTGGGGCAACCTGTCTACGCCGACCTCATACCAAGGC
CATCGAGAGCTCGGCGGAGAAGCGGCTCACGCTGTGCGAGATCTACGAGTGGATGGTCAAGAGCGTGCCCTACTT
CAAGGATAAGGTGACAGCAACAGCTCGGCGGGGCTGGAAGAATTCAATTCGTACATAATCTGTCCCTACACAGCAA
GTTCAATTCGTGTGACAGAAATGAAGGAAGTGGAAAAAGTTCTTGGTGGATGCTCAATCCAGAGGGTGGCAAGAGCGG
GAAATCTCCTAGGAGAAGAGCTGCATCCATGGACAACAACAGTAAATTTGCTAAGAGCCGAAGCCGAGCTGCCAA
GAAGAAAGCATCTCTCCAGTCTGGCCAGGAGGGTGTGGGGACAGCCCTGGATCACAGTTTTCCAAATGGCCTGC
AAGCCCTGGCTCTCACAGCAATGATGACTTTGATAACTGGAGTACATTTGCGCCCTCGAACTAGCTCAAATGCTAG
TACTATTAGTGGGAGACTCTCACCCATTATGACCGAACAGGATGATCTTGGAGAAGGGGATGTGCATTCTATGGT
GTACCCGCCATCTGCCGCAAGATGGCCTCTACTTTACCCAGTCTGTCTGAGATAAGCAATCCGAAAACATGGA
AAATCTTTTGGATAATCTCAACCTTCTCTCATACCAACATCATTAACTGTTTCGACCCAGTCTCACCTGGCAC
CATGATGCAGCAGACGCCGTGCTACTCGTTTGCGCCACCAAACACCAGTTTGAATTCACCCAGCCCAAACCTACCA
AAAAATATACATATGGCCAATCCAGCATGAGCCCTTTGCCCCAGATGCCTATACAAACACTTCAGGACAATAAGTC
GAGTTATGGAGGTATGAGTCAGTATAACTGTGCGCCTGGACTCTTGAAGGAGTTGCTGACTTCTGACTCTCCTCC
CCATAATGACATTATGACACCAGTTGATCCTGGGGTAGCCCAAGCCCAACAGCCGGGTTCTGGGCCAGAACGTAT
GATGGGCCCTAATTCGGTCATGTCAACCTATGGCAGCCAGGCATCTCATAACAAAATGATGAATCCCAGCTCCCA
TACCCACCCCTGGACATGCTCAGCAGACATCTGCAGTTAACGGGCGTCCCCTGCCCCACAGCGGTAAGCACCATGCC
CCACACCTCGGGTATGAACCGCTGACCCAAGTGAAGACACCTGTACAAGTGCCTCTGCCCCACAGCCCATGCC
GAGTGCCCTGGGGGGCTACTCCTCCGTGAGCAGCTGCAATGGCTATGGCAGAATGGGCCTTCTCCACCAGGAGAA
GCTCCCAAGTGACTTGGATGGCATGTTCAATTGAGCGCTTAGACTGTGACATGGAATCCATCATTGGAATGACCT
CATGGATGGAGATACATTGGATTTTAACTTTGACAATGTGTTGCCCAACCAAGCTTCCACACAGTGTCAAGAC
AACGACACATAGCTGGGTGTCAGGCTGAGGGTTAGTGAGCAGGTTACACTTAAAGTACTTCAGATTGTCTGACA
GCAGGAACTGAGAGAAGCAGTCCAAAGATGTCTTACCAACTCCCTTTTAGTTTTCTTGGTTAAAAAAGAAC
AAAAAAGAACCCCTCCTTTTTTCTTTCGTGAGACTTGGCAGCAAAGACATTTTTCTGTACAGGATGTTTGC
CCAATGTGTGAGGTTATGTGCTGCTGTAGATAAGGACTGTGCCATTGGAAATTTTATTACAATGAAGTGCCAAA
CTACTACACCATATAATTGCAGAAAAGATTTTCAGATCCTGGTGTGCTTTCAAGTTTTGTATATAAGCAGTAGA
TACAGATTGTATTTGTGTGTTTTTGGTTTTTCTAAATATCCAATTGGTCCAAGGAAAGTTTTATACTCTTTTTG
TAATACTGTGATTTGGCCTCATGTCTTGATAAGTTAAACTTTTTGTTTGTACTACCTGTTTTCTGCGGAAGTACGG
ATCACAAAGAACTGAATCTCCATTCTGCATCTCCATTGAACAGCCTTGGACCTGTTTACGTTGCCACAGAATTCA
CATGAGAACCAAGTAGCCTGTTATCAATCTGCTAAATTAATGGACTTGTTAAACTTTTTGAAAAAAGATTAA
ATGCCAGCTTTGTACAGGTCTTTTCTATTTTTTTTTGTTTATTTTGTATTTTGCAAATTTGTACAAACATTTAAA
TGGTTCTAATTTCCAGATAAATGATTTTTGATGTTATTGTTGGGACTTAAGAACATTTTTGGAATAGATATTGAA
CTGTAATAATGTTTTCTTAAAACTAGAGTCTACTTTGTTACATAGTCAGCTTGTAATTTTGTGGAACACAGGT
ATTTGGGGCAGCATTCAATTTTTCAATTTGTATTCTAACTGGATTAGTACTAATTTTATACATGCTTAACTGGT
TTGTACACTTTGGGATGCTACTTAGTGATGTTTCTGACTAATCTTAAATCATTGTAATTAGTACTTGCATATTCA
ACGTTTCAGGCCCTGGTTGGGCAGGAAAGTGATGTATAGTTATGGACACTTTGCGTTTCTTATTTAGGATAACTT
AATATGTTTTTATGTATGATTTTTAAAGAAATTTTCTGCTTCTACTGAACTATGCGTACTGCATAGCATCAAG
TCTTCTCTAGAGACCTCTGTAGTCTGGGAGGCCTCATAATGTTTGTAGATCAGAAAAGGGAGATCTGCATCTAA

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FIGURE 3896B

AGCAATGGTCCTTTGTCAAACGAGGGATTTTGATCCACTTCACCATTTTGAGTTGAGCTTTAGCAAAAGTTTCCC
CTCATAATTCTTTGCTCTTGTTCAGTCCAGGTGGAGGTTGGTTTTGTAGTTCTGCCTTGAGGAATTATGTCAAC
ACTCATACTTCATCTCATTCTCCCTTCTGCCCTGCAGATTAGATTACTTAGCACACTGTGGAAGTTTAAAGTGGA
GGAGGGAATTTAAAAATGGGACTTGAGTGGTTTGTAGAATTTGTGTTTATAAGTTTCAAGTTGAGATTATGTTAAAGC
TTGAGCTTAAAGAAATTTGAAAATTTCTTTAGCCTGTAGCAACCTAAACTGTAATTCCTATCATTATGTTTTATTAC
TTTCCAATTACCTGTAACCTGACAGACCAAAATTAATTGGCTTTGTGTCTTATTTAGTCCATCAGTATTTTCAAGTC
ATGTGGAAAGCCCAAAGTCATCACAAATGAAGAGAACAGGTGCACAGCACTGTTCTCTTGTGTTCTTGAGAAGGA
TCTAATTTTTCTGTATATAGCCACATCACACTTGCTTTGTCTTGTATGTTAATTGCATCTTCATTGGCTTGGTA
TTTCCTAAATGTTTAAACAAGAACACAAGTGTTCCTGATAAGATTTCTACAGTAAGCCAGCTGTATTGTAAGCTT
CCCACCGTGATGATCATTTTGTGAAGATTCATTGAACAGCCACCACTCTATCATCCTCATTGTTGGGGCAGTCCA
AGACATAGCTGGTTTTAGAAACCCAAAGTTCCTCTAAGCACAGCCTCCCGGTATGTAAGTGAACCTTGGTGCCAAA
GTACTTGTGTACTAATTTCTATTACTACGTACTGTCACTTTCTCCCGTGCCATTACTGCATCATAATACAAGGA
ACCTCAGAGCCCCCATTGTTCATTAAAGAGGCAACTACAGCCAAAATCACTGTTAAATCTTACTACTTCATGG
AGTAGCTCTTAGGAAAATATATCTTCCTCCTGAGTCTGGGTAATTATACCTCTCCCAAGCCCCCATTGTGTGTG
AAATCCTGTCATGAATCCTTGGTAGCTCTCTGAGAACAGTGAAGTCCAGGGAAAGGCATCTGGTCTGTCTGAAA
GCAAACATTATGTGGCCTCTGGTAGTTTTTTTCTGTGAAGAATACTGACTTTCTGGAGTAATGAGTATATATCAG
TTATTGTACATGATTGCTTTGTGAAATGTGCAAATGATATCACCTATGCAGCCTTGTGTTGATTTATTTTCTCTGG
TTGTACTGTTATTTAAAGCATATTGTATTATAGAGCTATTTCAGATATTTTAAATATAAAGATGTATTGTTTCCG
TAATATAGACGTATGGAATATATTTAGGTAATAGATGTATTACTTGGAAGTTCTGCTTTGACAACTGACAAAG
TCTAAATGAGCACATGTATCCCGAGTGAGCAGTAAATCAATGGAACATCCCAAGAAGAGGATAAGGATGCTTAAAA
TGGAATCATTCTCCAACGATATACAAATGGACTTGTTCAACTGCTGGATATATGCTACCAATAACCCAGCCC
CAACTTAAATTTCTTACATTCAAGCTCCTAAGAGTTCTTAATTTATACTAATTTTAAAGAGAAGTTTCTTTTC
TGGTTTTAGTTTGGGAATAATCATTCAATAAAAAAATGTATTGTGGTTTATGCGAACAGACCAACCTGGCATT
CAGTTGGCCTCTCCTTGAGGTGGGCACAGCCTGGCAGTGTGGCCAGGGGTGGCCATGTAAGTCCCATCAGGACGT
AGTCATGCCTCCTGCATTTGCTACCCGAGTTTAGTAACAGTGCAGATTCCACGTTCTTGTTCGATACTCTGAG
AAGTGCCTGATGTTGATGTACTTACAGACACAAGAACAATCTTTGCTATAATTGTATAAAGCCATAAATGTACAT
AAATTATGTTTAAATGGCTTGGTGTCTTTCTTTCTAATTATGCAGAATAAGCTCTTTATTAGGAATTTTTTG
AAGCTATTAAATACTTGAGTTAA

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FIGURE 3897

MAEAPQVVEIDPDFEPLPRPRSCWPLPRPEFSQSNSATSSPAPSGSAAANPDAAAGLPSASAAAVSADFMSNLS
LLEESDFPQAPGSVAAAIAAAAAAAAAATGGLCGDFQGPEAGCLHPAPPQPPPPGPLSQHPPVPPAAAGPLAGQPR
KSSSSRRNAWGNLSYADLITKAISSAEKRLTSLQIYEWVKSVPYFKDKGDSNSSAGWKNSIRHNLSLHSKFIR
VQNEGTGKSSWWMLNPEGKSGKSPRRRAASMDNNSKFAKSRRAAKKKASLQSGQEGAGDSPGSQFSKWPASPG
SHSNDDFDNWSTFRPRTSSNASTISGRSLPIMTEQDDLGEVDVHSMVYPPSAAKMASTLPSLSEISNPENMENLL
DNLNLLSSPTSLTVSTQSSPGTMMQQTPCYSFAPPNTSLNSPSPNYQKYTYGQSSMSPLPQMFIQTLQDNKSSYG
GMSQYNCAPGLLKELLTSDSPPHNDIMTPVDPGVAQPNRSRVLGQNVMMGPNSVMSTYGSQASHNKMMNPSSHTHP
GHAQQTSAVNGRPLPHTVSTMPHTSGMNRLTQVKTPVQVPLPHPMQMSALGGYSSVSSCNGYGRMGLLHQEKLP
DL DGMFIERLDCMESIIRNDLMDGDTLDFNFDNVLPNQSFPHSVKTTTHSWVSG

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FIGURE 3898

GGTTCATTTTCGTGTCTCGGCCATGTTTCCTAGAGTCTCGACGTTCCCTACCTCTTCGCCCCCTTTCCCGCCACCCCT
TTGTCCTCTGGAAGCCCGGAGACATCAGCGGCTGCGATTATGCTACTCACTGTTTCGGCACGGAACAGTCAGGTAC
CGCAGTTTCAGCGCTGTTGGCCCGGACAAAAATAACATCCAAAGATATTTTGGCACTAACAGTGTGATCTGTAGC
AAGAAAGATAAGCAGTCTGTTTGAAGTGAAGGAGACTTCCAAGGAGACTTCAGAGAGCCAAGACAGTGAAAAGGAA
AATACGAAAAAAGACTTGTTAGGCATTATTAAGGGCATGAAAGTTGAATTAAGCACAGTAAATGTACGAACAACA
AAGCCCCCCTAAAAGAAGACCACTTAAAAGTTTGAAGCTACACTTGGCAGGCTTCGAAGAGCTACAGAATATGCT
CCAAAGAAGAGAATTGAGCCCCGTAGTCCTGAGTTGGTGGCAGCTGCATCTGCTGTGGCAGATTCTCTCCCTTTT
GATAAGCAAACAACCAAGTCAGAGCTGCTGAGCCAGCTCCAGCAGCATGAGGAAGAGTCAAGGGGCACAGAGAGAT
GCAAAGCGACCTAAAATTAGTTTCAGTAACATAATATCAGATATGAAAGTTGCCAGATCTGCTACAGCTAGAGTT
CGTTCAAGACCAGAGCTTCGGATTTCAGTTTGATGAAGGCTATGACAATTATCCTGGCCAGGAGAAGACGGATGAT
CTTAAAAAAGGAAAAATATATTCACAGGGAAAAGACTTAATATTTTTGACATGATGGCAGTTACTAAAGAAGCA
CCTGAAACAGACACATCACCTTCACTTTGGAAATGTGGAATTTGCTAAGCAGTTAGCCACAGTAAATGAACAACCC
CTTCAGAATGGATTTGAAGAGCTGATCCAGTGGACAAAAGAGGGGAACTATGGGAGTTCCCAATTAACAATGAA
GCAGGTTTTGATGATGATGGTTCAGAATTTTCATGAACATATATTTCTGGAGAAACACCTGGAGAGCTTTCCAAAA
CAAGGACCAATTCGCCACTTCATGGAGCTGGTGACTTGTGGCCTTTCCAAAAACCCATATCTTAGTGTTAAACAG
AAGGTTGAACACATAGAGTGGTTTAGAAATTATTTAATGAAAAAAGGATATTCTAAAAGAAAGTAACATACAG
TTCAATTAAAGACCATGGAAATTTTTATTTCAAACAATTAGAGATGGATATTACAATAAAATAAATTTTACT
AGAGTTTGT

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FIGURE 3899

MFPRVSTFLPLRPLSRHPLSSGSPETSAAAIMLLTVRHGTVRYRSSALLARTKNNIQRYFGTNSVICSKKDKQSV
RTEETSKETSESQDSEKENTKKDLLGIIKGMKVELSTVNVRTTKPPKRRPLKSLEATLGRLRRATEYAPKKRIEP
LSPELVAAAASAVADSLPFDKQTTKSELLSQLQQHEEESRAQRDAKRPKISFSNIISDMKVARSAVARVSRPELR
IQFDEGYDNYPGQEKTDLLKKRKNIFTGKRLNIFDMMAVTKEAPETDTSPSLWNVEFAKQLATVNEQPLQNGFEE
LIQWTKEGKLWEFFINNEAGFDDGSEFHEHIFLEKHLESFPPKQGPRIHFMELVTCGLSKNPYLSVKQKVEHIEW
FRNYFNEKKDILKESNIQFN

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FIGURE 3900

CCCCCGAGCGCCGCTCCGGCTGCACCGCGCTCGCTCCGAGTTTCAGGCTCGTGCTAAGCTAGCGCCGTCGTCG
TCTCCCTTCAGTCGCCATCATGATTATCTACCGGGACCTCATCAGCCACGATGAGATGTTCTCCGACATCTACAA
GATCCGGGAGATCGCGGACGGGTGTGCCTGGAGGTGGAGGGGAAGATGGTCAGTAGGACAGAAGGTAACATTGA
TGACTCGCTCATTGGTGGAAATGCCTCCGCTGAAGGCCCCGAGGGCGAAGGTACCGAAAGCACAGTAATCACTGG
TGTCGATATTGTCATGAACCATCACCTGCAGGAAACAAGTTTCACAAAAGAAGCCTACAAGAAGTACATCAAAGA
TTACATGAAATCAATCAAAGGGAAACTTGAAGAACAGAGACCAGAAAGAGTAAACCTTTTATGACAGGGGCTGC
AGAACAAATCAAGCACATCCTTGCTAATTTCAAAAACCTACCAGTTCTTTATTGGTGAAAACATGAATCCAGATGG
CATGGTTGCTCTATTGGACTACCGTGAGGATGGTGTGACCCCATATATGATTTTCTTTAAGGATGGTTTAGAAAT
GGAAAAATGTTAAACAAATGTGGCAATTATTTTGGATCTATCACCTGTCATCATAACTGGCTTCTGCTTGTATCC
ACACAACACCAGGACTTAAGACAAATGGGACTGATGTCATCTTGAGCTCTTCATTTATTTTGACTGTGATTTATT
TGGAGTGGAGGCATTGTTTTTAAGAAAAACATGTCATGTAGGTTGTCTAAAAATAAAATGCATTTAACTCATT
GAGAG

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FIGURE 3901

MIYRDLISHDEMFSDIYKIREIADGLCLEVEGKMVSRTGNIDDSLIGGNASAEGPEGEGTESTVITGVDIVMN
HHLQETSFTKEAYKKYIKDYMKSIKGGLEQRPERVKPFMTGAAEQIKHILANFKNYQFFIGENMNPdGMVALLD
YREDGVTPYMIFFKDGLEMEKC

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GGGGACACGAGCGGGCGTGTCTGAGCCCCGGCCCGCCGGCATGGCGGCTCTCCCGGGGCCCTCCGCTGGCCG
CGGCTAGGGCCGGATGGAGCCGCGGGACGGTAGCCCGAGGGCCCGGAGCAGCGACTGCGAGTCGGCTTCCGCCTC
GTCCAGCGGCTCCGAGCGCGACGCCGGTCCCGAGCCGGACAAGGCGCCGCGGCAGCTCAACAAGCGGCGCTTCCC
GGGGCTGCGGCTCTTCGGGCACAGGAAAGCCATCACCAAGTCTGGCCTCCAGCACCTGGCCCCCCTCCGCCAC
CCCTGGGGCCCCGGTGACGAGTCAGAGCGGCAGATCCGGAGTACAGTGGACTGGAGCGAGTCGGCGACATATGG
GGAGCACATCTGGTTCGAGACCAACGTGTCCGGGGACTTCTGCTACGTTGGGGAGCAGTACTGTGTAGCCAGGAT
GCTGCAGAAGTCAGTGTCTCGAAGAAAGTGCAGCAGCTGCAAGATTGTGGTGCACACGCCCTGCATCGAGCAGCT
GGAGAAGATAAATTTCCGCTGTAAGCCATCCTTCCGTGAATCAGGCTCCAGGAATGTCTTCGAGCCAACTTTG
ATGGCACCACTGGGTACACAGACGACGCCAGGACGGCAAGTGTCCGCACTGTGGGAAGGGATTCCAGCAGAAGT
CACCTTCCACAGCAAGGAGATTGTGGCCATCAGCTGCTCGTGGTGCAAGCAGGCATACCACAGCAAGGTGTCCTG
CTTCGTGCTGCAGCAGATCGAGGAGCCGTGCTCGCTGGGGGTCCACGCAGCCGTGGTCATCCCGCCACCTGGAT
CCTCCGCGCCCCGGAGGCCCCAGAATACTCTGAAAGCAAGCAAGAAGAAGAAGAGGGCATCCTTCAAGAGGAAGTC
CAGCAAGAAAGGGCCTGAGGAGGGCCGCTGGAGACCCTTCATCATCAGGCCACCCCCCTCCCCCTCATGAAGCC
CCTGCTGGTGTGTTGTGAACCCCAAGAGTGGGGGCAACCAGGGTGCAAAGATCATCCAGTCTTTCCTCTGGTATCT
CAATCCCCGACAAGTCTTTCGACCTGAGCCAGGAGGGGCCAAGGAGGCGCTGGAGATGTACCGCAAAGTGCACAA
CCTGCGGATCCTGGCGTGCGGGGGCGACGGCACGGTGGGCTGGATCCTCTCCACCCTGGACCAGCTACGCCTGAA
GCCGCCACCCCCTGTTGCCATCCTGCCCTGGGTACTGGCAACGACTTGGCCCCGAACCTCAACTGGGGTGGGGG
CTACACAGATGAGCCTGTGTCCAAGATCCTCTCCACGTGGAGGAGGGGAACGTGGTACAGCTGGACCCTGGGA
CCTCCACGCTGAGCCCAACCCGAGGCAGGGCCTGAGGACCGAGATGAAGGCGCCACCGACCGGTTGCCCTGGA
TGTCTTCAACAATACTTTCAGCCTGGGCTTTGACGCCCACGTACCCTGGAGTTCACAGAGTCTCGAGAGGCCAA
CCCAGAGAAATTCAACAGCCGCTTTTCGGAATAAGATGTTCTACGCCGGGACAGCTTCTCTGACTTCTTGATGGG
CAGCTCCAAGGACCTGGCCAAGCACATCCGAGTGGTGTGTGATGGAATGGACTTGACTCCCAAGATCCAGGACCT
GAAACCCAGTGTGTGTTGTTTTCTGAACATCCCCAGGTACTGTGCGGGCACCATGCCCTGCGGCCACCCCTGGGGA
GCACCACGACTTTGAGCCCCAGCGGCATGACGACGGCTACCTCGAGGTGATTGGCTTCACCATGACGTGATTGGC
CGCGCTGCAGGTGGGCGGACACGGCGAGCGGCTGACGCAGTGTGCGGAGGTGGTGTCTACCACATCCAAGGCCAT
CCCGGTGCAGGTGGATGGCGAGCCCTGCAAGCTTGACGCTTACGCATCCGCATTGCCCTGCGCAACCAGGCCAC
CATGGTGCAGAAGGCCAAGCGGCGGAGCGCCGCCCCCTGCACAGCGACCAGCAGCCGGTGCCAGAGCAGTTGCG
CATCCAGGTGAGACGCGTCAGCATGCACGACTATGAGGCCCTGCACTACGACAAGGAGCAGCTCAAGGAGGCCCTC
CGTGCCGCTGGGCACTGTGGTGGTCCCAGGAGACAGTGACCTAGAGCTCTGCCGTGCCACATTGAGAGACTCCA
GCAGGAGCCCGATGGTGTCTGGAGCCAAGTCCCCGACATGCCAGAACTGTCCCCAAGTGGTGTCTTCTGGACGC
CACCAC TGCCAGCCGCTTCTACAGGATCAACCGAGCCAGGAGCACCTCAACTATGTGACTGAGATCGCACAGGA
TGAGATTTATATCCTGGACCCTGAGCTGCTGGGGGCATCGGCCCGGCTGACCTCCCAACCCCCACTTCCCCCTCT
CCCCACCTCACCCTGCTCACCACGCCCCGGTCACTGCAAGGGGATGCTGCACCCCTCAAGGTGAAGAGCTGAT
TGAGGCTGCCAAGAGGAACGACTTCTGTAAGCTCCAGGAGCTGCACCAGCTGGGGGCGACATCATGCACCGAGA
CAAGCAGAGTCGCACGCTCCTGCACCACGCAGTCAGCACTGGCAGCAAGGATGTGGTCCGCTACCTGCTGGACCA
CGCTCCCCCAGAGATCCTTGATGCGGTGGAGGAAAACGGGAGACCTGTTTGACCAAGCAGCGGCCCTGGGCCA
GCGCACCATCTGCCACTACATCGTGGAGGCCGGGGCCAGACCAGCAGGGCGACACTCCCCGGCAGCAGGCTGAGA
AGGCTCAGGACACCGAGCTGGCGGCTACCTGGAGAACC GGCGAGCATACCATGATCCAGCGGGAGGACCAAG
AGACGGCTGTGTAGCGGGCGCCACGGGCAGCAGGAGGGACAATGCGGCCAGGGGATGAGCGCTTCTCTTGCCC
ACCTCACTGCCACATTCCAGTGGGACGGCCACGGGGGACCTAGGCCCAAGGAAAGAGCCCCATGCCGCCCCCT
AAGGAGGCGCACAGACCTAGGGCTGGAGCTCAGGAGCTGGGGGGCTCACCTGTTCCCTGAGGACCCCGCCGGAC
CCGGAGGCTCACAGGGAACAAGACACGGCTGGGTGGATATGCCCTTTGCCGGGGTTCTGGGGCAGGGCGCTCCCT
GGCCGCAGCAGATGCCCTCCCAGGAGTGGAGGGGCTGGAGAGGGGAAGGCCCTTCGGGAAGAGGCTTCTGGGCC
CCTGGTCTTCGGCCGGGTCCCCAGCCCCGCTCCTGCCCCACCCACCTCCCCCGGCTTCTCCCAGAACTCA
GTGCCCTGCTGCACTTGCCCTGCCCTGCCCTTGCTTGGCACCCGCTCCGGCGACCTCCCCGCTCCTCTGTCTATT

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FIGURE 3903A

TTTTCTTTCTGGCTGATGATTTGTCACTTCTAGTCACTTCTGCCTTGTGACCACACACCCAGGCTTGACAAAG
CTGTTCTGCAGATCAGAAAGAAGGGTTCTTGGTCATACACCAGTACTACCAAGGACAGCTTTTTCTGCAAGA
TCTGTTACCTAAAGCAATAAAAAATGGCCAGAGGATCAGTGTCCGATGAGGAAATGATGGAGCTCAGAGAAGCTT
TTGCCAAAGTTGATACTGATGGCAATGGATACATCAGCTTCAATGAGTTGAATGACTTGTTCAAGGCTGCTTGCT
TGCTTTTGCTGGGTATAGAGTACGAGAAATTACAGAAAACCTGATGGCTACAGGTGATCTGGACCAAGATGGAA
GGATCAGCTTTGATGAGTTTATCAAGATTTTCCATGGCCTAAAAAGCACAGATGTTGCCAAGACCTTTAGAAAAG
CAATCAATAAGAAGGAAGGATTTGTGCAATCGGTGGTACTTCAGAGCAGTCTAGCGTTGGCACCCAACTCCT
ATTCAGAGGAAGAAAAGTATGCCTTTGTCAACTGGATAAAACAAAGCCCTGGAAAATGATCCTGATTGTGGCATG
TCATCCCAATGAACCCAAACACGAATGATCTCTTTAATGCTGTTGGAGATGGCATTGTCTTTGTAAAATGATCA
ACCTGTCAGTGCCAGACACAATTGATGAAAGAACAATCAACAAAAAGAAGCTAACCCCTTTACCATTACAGAAA
ATCTGAACCTTGGCTCTGAACCTCTGCCTCAGCCATCGGGTGCCATGTGGTCAACATAGGGGCTGAGGACCTGAAGG
AGGGGAAGCCTTATCTGGTCTGGGACTTCTGTGGCAAGTCATCAAGATTGGGTTGTTTGCTGACATTGAACCTCA
GCAGAAATGAAGCTCTGATTGCTCTTTTGAGAGAAGGTGAGAGCCTGGAGGATTTGATGAACTCTCCCTGAAG
AGCTCTTGCTGAGGTGGGCTAATTACCACCTGGAAAATGCAGGCTGCAACAAAATTGGCAACTTCAGTACTGACA
TCAAGGACTCAAAAGCTTATTACCACCTGCTTGAGCAGGTGGCTCCAAAAGGAGATGAAGAAGGTGTTCTGCTG
TTGTTATTGACATGTCAGGACTGCGGGAGAAGGATGACATCCAGAGGGCAGAAATGCATGCTGCAGCAGGCGGAGA
GGCTGGGCTGCCGGCAGTTTGTACAGCCACAGATGTTGTCCGAGGGAACCCCAAGTTGAACTTGGCTTTTATTG
CCAACCTCTTTAACAGATACCCTGCCCTGCACAAACCAGAGAACCAGGACATTGACTGGGGGGCTCTGAAGGTG
AGACGAGAGAAGAGCGGACATTTAGGAACTGGATGAACTCCCTGGGTGTTAACCTCGAGTCAATCATTGTACA
GTGACTTATCAGATGCCCTGGTCATCTTCCAGCTCTATGAAAAGATCAAAGTTCTGTTGACTGGAACAGAGTAA
ACAAACCGCCATACCCCAAACTGGGAGGCAATATGAAGAAGCTTGAGAATTGTAACACGCGGTAGAATTGGGGA
AGAATCAAGCGAAGTTCTCCCTGGTTGGCATCGGTGGACAAGATCTCAATGAAGGAAACCGCACTCTCACACTGG
CCTTGATTTGGCAGCTAATGAGAAGGTATACACTGAATATCCTCGAAGAAATTGGTGGTGGCCAGAAGGTCAATG
ATGACATTATTGTCAACTGGGTGAATGAAACATTGAGGGAAGCAAAAGAAAGTTTATCCATCTCTAGTTTCAAGG
ACCCGAAGATTAGTACAAGTCTGCCTGTTCTGGACCTCATCGATGCCATCCAACCAGGTTCCATTAACATATGACC
TTCTGAAGACAGAAAATCTGAATGATGATGAGAACTCAACATGCAAAATATGCCATCTCTATGGCCCGAAAAA
TTGGAGCAAGAGTGTATGCCCTGCCAGAAGACCTGGTTGAAGTGAACCCCAAAATGGTCATGACCGTGTGCTGCT
GCCTCATGGGGAAGGAATGAAGAGGTGTGAGGCCAATGGGGCTGGGTGGGAGGCGGTGCATCTACTCTGAC
TGCCCCGCACAGATGCTCCAGGGATGATTCAAGCCATTCCAAAGTTCAACTTGGTGACACTCTATAAGATTCCAA
AAAGCACATATTAGTGCAGCCAAGTAGCCTCTCCTGTATTTAAACAAAAGTGCTTCATTCTTGCAGGAGGCCCA
ACCTCCTATATATAGGTTTCTATTCTTGATTTATTTGCTTCTTCGAAAATCTAGAGGAAAAGAAAGATTATTT
TCCAGGTACCCTTCTCGCTTTTGCCATTAGCCAAGGATAGAAGCTGCAGTGGTATTAATTTTGATATAATCTTTC
AAACCAGCTTCATGTGGCTTCCCTTTTCTTTGTTCAAGATGAGGGCCAGGAGGGGAAACATCACACCTGCCCTAA
ACCTGTTCCTGGAGGTGAGCTTTGATCTGTTGCAAGCCCTCTTCTGTCCCTCTTCTACCTGCCCTCCCT
TGACTTTGCTCCTCACACTTTTGAACCATGCCTTCCGGGGGGGCCATCTCTTCTGGCCGTCCTTGTCTCTGGG
CCACTTGGAGTGTGTGATAAATCAGTCAAGCTGTTGAAGTCTCAGGAGTCTCTGGTAGCCTGCAGAAGTAAGCCT
CATCATCAGAGCCTTTCTCAAACTGGAGTCCCAATGTCATCAGGTTTTGTTTTTTTTTTCAGCCACTAAGAACC
CCTCTGCTTTTAACTCTAGAATTTGGGCTTGGACCAGATCTAACATCTTGAATACTCTGCCCTCTAGAGCCTTCA
GCCTTAATGGAAGGTTGGATCCAAGGAGGGTGTAATGGAGCATCAAGCCACTCGGCGGCAGCATGGAGCTATAAC
TAAGCATCCTTTAGGGTTCTGCCTCTCCAGGCATTTAGCCCTCACATTAGATCTAGTTACTGTGGTATGGCTAAT
ACCTGTCAACATTTGGAGGCAATCCTACCTTGCTTTTGCTTCTAGAGCTTAGCATATCTGATTGTTGTCAGGCCA
TATTATCAATGTTTACTTTTTTGGTACTATAAAAGCTTTCTGCCACCCCTAACTCCAGGGGGGACAAATATGTGC
CAATCAATAGCACCCCTACTCACATACACACACCTAGCCAGCTGTCAAGGGCAGAAATGAATCTATGCTGGATA
AGAAATGGTGGAACTGCGTTATGAAGAGCTAATTTACTGGACAAAGAATTCCAAAGCAAAACCAGAACAGTATGA
ATTTGAGCAGGTCTCATAGGTTGAGCAATTTCCCCCTAAACCAACTGAAGGCTAAAAAGCAACAGGCCATTGTGA
ACCAATGCAAGACGCCCTCTATCATGGTGAAGGCTCCATCAATGAGGTATCTTCTTTAGTGGTGGTATGTAATG
GAACCTTAGCCATTTTTCAAAGCAATTGAAATGCATTGCTCTGGATCTGTTCTTGGCAGTGGACTCAGAAAGCCA
ACATGTGGCTCCTCCAGCCATAACCAGTATTTTTGCTGCTTCTGAATACAAATTGGTTGGTTTTGACTTCAGA

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FIGURE 3903B

TTGAACTTACTGTAGCCTCAGATGATTCCCCCTCCGCCTCCAGGAAGAAAGAATGTTACTGCCTTAATAAAAA
ATGAAAAGAGAATGATGCTCAAATCTTCCAAATAAAATGTTCCCTAT

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FIGURE 3904

AAAGCGAGAGTGAGTGGGACCGGAGGGGCGGGGCATCATATGGGCGGGGCTGAGGCGAGGCCCCGGCGGCCATCT
TGAGCCCCGCCCTTTTACTTCGGCCCGCTTCTTCTGGTCACTCCGCCACCGTAGAATCGCCTACCATTGTTGGTGCAA
GCAAAAAGCAATCAGCAATTGGACAGGAAAAGAAATGGCATTGAAGCAGATTTCAGCAACAAGTGCTTTGGGGGA
TTGCAGAAAGTTTTTGAACATGACAGTGTTGAACTAACTGCAAAATGAAATTTGCTGTCTACTTACCACCAAAG
GCAGAAACAGGAAAGTGCCCTGCACTGTATTGGCTCTCAGGTTTAACTTGACAGAGCAAAATTTTATATCAAAA
TCTGGTTATCATCAGTCTGCTTCAGAACATGGTCTTGTGTGTCATTGCTCCAGATACCAGCCCTCGTGGCTGCAAT
ATTAAAGGTGAAGATGAGAGCTGGGACTTTGGCACTGGTGCTGGATTTTATGTTGATGCCACTGAAGATCCTTGG
AAAACCAACTACAGAATGTACTCTTATGTACAGAGGAGCTTCCCCAACTCATAAATGCCAATTTTCCAGTGGAT
CCCCAAAGGATGTCTATTTTTGGCCACTCCATGGGAGGTCATGGAGCTCTGATCTGTGCTTTGAAAAATCCTGGA
AAATACAAATCTGTGTCAGCATTGCTCCAATTTGCAACCCTGTACTCTGTCCCTGGGGCAAAAAAGCCTTTAGT
GGATATTTGGGAACAGATCAAAGTAAATGGAAGGCTTATGATGCTACCCACCTTGTGAAATCCTATCCAGGATCT
CAGCTGGACATACTAATTGATCAAGGGAAAGATGACCAGTTTCTTTTAGATGGACAGTTACTCCCTGATAACTTC
ATAGCTGCCTGTACAGAAAAGAAAATCCCGTTGTTTTTCGATTGCAAGAGGGTTATGATCATAGCTACTACTTC
ATTGCAACCTTTATTACTGACCACATCAGACATCATGCTAAATACCTGAATGCATGAAAAAACTCCAAATAAGAG
AATCTCTTCAGGATTATAAAAGTTGTAAAATGCAACTGTATTGCTGAGCAAAAAAAAAAAAAATTCAAAACATTG
GATTTTATAGTGCTAAAAGGGCTTTATTCTATAGTTGAATCACCTCTGAATAAAGATATAAAACCT

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FIGURE 3905

MALKQISSNKCFFGGLQKVFEHDSVELNCKMKFAVYLPPKAETGKCPALYWLSGLTCTEQNFISKSGYHQSASEHG
LVVIAPDTSPRGCNIGEDSWDFGTGAGFYVDATEDPWKTNYRMYSYVTEELPQLINANFPVDPQRMSIFGHSM
GGHGALICALKNPGKYKSVSAFAPICNPVLCPWGKKAFFSGYLGTDQSKWKAYDATHLVKSYPGSQLDILIDQGKD
DQFLLDGQLLPDNFIAACTEKKIPVVFRLQEGYDHSYYFIATFITDHIRHHAKYLNA

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FIGURE 3906

GGCCGGTGGCGGGACTCTGGGGAAATGGCTGCGTCTTCGAGTGGTGAGAAGGAGAAGGAGCGGCTGGGAGGCGG
TTTGGGAGTGGCGGGTGGTAACAGCACACGAGAGCGGCTGCTGTCTGCGCTTGAGGACTTGAGGTCCTGTCTAG
GGAAC TTATAGAAATGCTGGCAATTTCAAGAAACCAAAAGTTGTTACAGGCTGGAGAGGAAAAACAGGTCTTGGA
GTTGTTAATTCACCGAGATGGGGAATTTCAAGAACTAATGAAATTGGCACTTAATCAGGGAAAAATTCATCATGA
AATGCAAGTTTTAGAAAAAGAAGTAGAGAAGAGAGACAGTGATATTCAGCAGCTACAAAAACAGCTAAAGGAAGC
AGAACAAATACTGGCAACAGCTGTTTACCAAGCGAAGGAGAACTCAAGTCAATAGAAAAAGCAAGAAAAGGTGC
TATCTCCTCTGAAGAAATAATTAAGTATGCACATAGGATCAGTGCAAGTAATGCTGTATGTGCTCCACTGACCTG
GGTTCCAGGGGACCCCCGGAGACCCCTACCCAAC TGATTTAGAGATGAGAAGTGGGTACTGGGTCAGATGAACAA
TCCTTCCACTAATGGCGTGAATGGCCATTTACCAGGAGATGCACTTGCAAGCAGGAAGATTGCCAGATGTCCTTGC
TCCACAGTATCCATGGCAGTCAAATGACATGTCGATGAATATGTTACCACCAAATCATAGTAGTGACTTTTTGTT
GGAACCTCCTGGGCATAATAAGAAAATGAAGATGATGTAGAGATTATGTCAACGGACTCCTCAAGCAGTAGTAG
TGAGTCTGATTGAAAACTTAAAGACAATATACAGAATTGAATACTGTAGAATTCTGTTTCTTAAACAGTAGCA
GGGAAATGTAACTACAGGTGACAAAAAATACCCAGGTAAACACTGGCTTTGGTAGAATTGTGCAGTCATTAAAA
GTCAAAATTTTTGACTTTCTTTTTAAAGCCAAAGACCATAGTTTTAGTTTTAAGCCACTAGGTAGATATTTAGG
GGAATAGTCAAATTTACTGTTGAAAAAGCAGTTGCTATGTGCTTCTTACCCTGTTCTGTTCCAGTTTTGCTGG
ATTTGTACATAGCCATTCTAGAAATAGAGTTGAGGGAAATTATCCATATACATATCACTAATAGGCTTCTTGGA
TTATTTAGAAAAGCATTTTTTAACTGGCAGTGATGACTGAATAGGCATCATATTTCTTTTGTGTGTCATTTAA
AAGTAACAAAACTGCCATTTGACAGTAAAGGCTCTTGGCTTCTGTTGGAGGCATGGGAAATTGTCTCAATTTGT
ACAGTTTGTAAATTGTAATTTTGTAAATAAATTTGTTGTACATTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3907

MAASSSGEKEKERLGGGLGVAGGNSTRERLLSALEDLEVLRSRELIEMLAISRNOQLQAGEENQVLELLIHRDGE
FQELMKLALNQGKIHHMQVLEKEVEKRDSDIQQQLQKQLKEAEQILATAVYQAKEKLKSIEKARKGAISSEETIK
YAHRIASNAVCAPLTWVPGDPRRPYPTDLEMRSGLLGQMNPNSTNGVNGHLPGDALAAGRLPDVLAPQYPWQSN
DMSMNMLPPNHSSDFLLEPPGHNKENEDDVEIMSTDSSSSSSSED

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FIGURE 3908

GCAGATCCCTACCGCAGTAGCCGCTCTGCCGCCGCGGAGCTTCCCGAACCTCTCAGCCGCCCGGAGCCGCTCC
CGGAGCCCGGCCGTAGAGGCTGCAATCGCAGCCGGGAGCCCGCAGCCCGCGCCCCGAGCCCGCCGCCCTTCG
AGGGCGCCCCAGGCCGCGCCATGGTGAAGGTGACGTTCAACTCCGCTCTGGCCCAAGGAGGCCAAGAAGGACG
AGCCCAAGAGCGGCGAGGAGGCGCTCATCATCCCCCGACGCCGTGCGGGTGGACTGCAAGGACCCAGATGATG
TGGTACCAGTTGGCCAAAGAAGAGCCTGGTGTGGTGCATGTGCTTTGGACTAGCATTATGCTTGCAGGTGTTA
TTCTAGGAGGAGCATACTTGTACAAATATTTTGCACCTCAACCAGATGACGTGTACTACTGTGGAATAAAGTACA
TCAAAGATGATGTATCTTAAATGAGCCCTCTGCAGATGCCCCAGCTGCTCTCTACCAGACAATTGAAGAAAATA
TTAAATCTTTGAAGAAGAAGAAGTTGAATTTATCAGTGTGCCTGTCCAGAGTTTGCAGATAGTGATCCTGCCA
ACATTGTTTCATGACTTTAACAAGAACTTACAGCCTATTTAGATCTTAACCTGGATAAGTGCTATGTGATCCCTC
TGAACACTTCCATTGTTATGCCACCCAGAAACCTACTGGAGTTACTTATTAACATCAAGGCTGGAACCTATTTGC
CTCAGTCTATCTGATTTCATGAGCACATGGTTATTACTGATCGCATTGAAAACATTGATCACCTGGGTTTCTTTA
TTTATCGACTGTGTATGACAAGGAACTTACAACTGCAACGCAGAGAACTATTAAAGGTATTCAGAAACGTG
AAGCCAGCAATTGTTTCGCAATTCGGCATTTTGAAAACAAATTTGCCGTGGAACTTTAATTTGTTCTTGAACAG
TCAAGAAAAACATTATTGAGGAAAATTAATATCACAGCATAACCCACCCCTTACATTTTGTGCAGTGATTATTT
TTTAAAGTCTTCTTTTCATGTAAGTAGCAAACAGGGCTTTACTATCTTTTCATCTCATTAAATCAATTAACCAT
TACCTTAAATTTTTTTCTTTTGAAGTGTGGTGTCTTTTATATTTGAATTAGTAACTGTATGAAGTCATAGATAA
TAGTACATGTCACCTTAGGTAGTAGGAAGAATTACAATTTCTTTAAATCATTTATCTGGATTTTATGTTTTATT
AGCATTTTCAAGAAGACGGATTATCTAGAGAATAATCATATATATGCATACGTAAAAATGGACCACAGTGACTTA
TTTGTAGTTGTTAGTTGCCCTGCTACCTAGTTTGTAGTGCATTTGAGCACACATTTAATTTTCTCTAATTAA
AATGTGCAGTATTTTCAGTGTCAAATATATTTAACTATTTAGAGAATGATTCCACCTTTATGTTTTAATATCCT
AGGCATCTGCTGTAATAATATTTTAGAAAATGTTTGAATTTAAGAAATAACTTGTGTACTAATTTGTATAACC
CATATCTGTGCAATGGAATATAAATATCACAAAGTTGTTTAACTAGACTGCGTGTGTTTTTCCCGTATAATAAA
ACCAAAGAATAGTTTGGTTCTTCAAATCTTAAGAGAATCCACATAAAAGAAGAACTATTTTTTAAAAATTCAT
TCTATATATACAATGAGTAAATCACAGATTTTTTCTTTAAATAAAAAATAAGTCATTTTAATAACTAAACCAGAT
TCTTTGTGGATACTATTAAAGTAACATTTAAGCCTCAACCTTG

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FIGURE 3909

MVKVTFNSALAQKEAKKDEPKSGEEALIIPPDAVAVDCKDPDDVVPVGQRRRAWCWCFCGLAFMLAGVILGGAYL
YKYFALQPDDVYYCGIKYIKDDVILNEPSADAPAALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFN
KKLTAYLDLNLDKCYVIPLNTSIVMPPRNLLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHD
KETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICS

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FIGURE 3910

TTTAGTAAATCACACAAAAATCCAGCAGAAATTGTGAAAATCCTGAAAGACAATTTGGCCATTTTGGAAAAGCAA
GACAAAAAGACAGACAAGGCTTCAGAAGAAGTGTCTAAATCACTGCAAGCAATGAAAGAAATTCTGTGTGGTACA
AACGAGAAAGAACCCCCAACAGAAGCAGTGGCTCAGCTAGCACAGAAGCTCTACAGCAGTGGCCTGCTGGTGACA
CTGATAGCTGACCTGCAGCTGATAGACTTTGAGGGAAAAAAGATGTGACCCAGATATTTAACAACATCTTGAGA
AGACAGATAGGCACTCGGAGTCCTACTGTGGAGTATATTAGTGCTCATCCTCATATCCTGTTTATGCTCCTCAAA
GGATATGAAGCCCCACAGATTGCCTTACGTTGTGGGATTATGCTGAGAGAATGTATTGACATGAACCACTTGTC
AAAATCATCCTCTTTTTCTAATCAATTCAGAGATTTCTTTAAGTACGTGGAGTTGTCAACATTTGATATTGCTTCA
GATGCCTTTTGCTACTTTCAAGGATTTACTAACCAGACATAAAGTGTTGGTAGCAGACTTCTTAGAACAAAATTAC
GACACTATTTTTGAAGACTATGAGAAATTGCTTCAGTCTGAGAATTATGTTACTAAGAGACAGTCTTTAAAGCTG
CTAGGGGAGCTGATCCTGGACCGTCACAACCTTTGCCATCATGACAAAGTATATCAGCAAGCCGGAGAACCTGAAA
CTCATGATGAACCTCCTTCGGGATAAAAGTCCCAACATCCAGTTTGAAGCCTTTCATGTTTTAAGGTGTTTGTG
GCCAGTCCTCACAAAACACAGCCTATTGTGGAGATCCTGTTAAAAAATCAGCCCAAACCTCATTGAGTTTCTGAGC
AGCTTCCAAAAGAAAGGACGGATGATGAGCAGTTCGCTGACGAGAAGAACTACTTGATTAAACAGATCCGAGAC
TTGAAGAAAACGGCCCCTTGAAGAGCTCCCCGGCCCCGTGTACAGTCAGTCGTCTCATTGTCCAGTTTGTACAG
TGTCATTTTCAGAAAGTCATCATTCTTGGGAAGACTTTGGAGGTGCCATTTTTTCTGCTGTAATTGTTCTGGG
TAGATGGAGTATAAACATTTGAATGGAAAAAATTAACCTAGAATAATATATTCAATTTAGTCAAGTCTGTGATT
ATTTATGTGAAATGAGAACCATTGTATCAGATGTTGATAAAAGCAATTTTAACTTGCAGATGTGAGCCCCCTGGGC
ACAATGAGCCGCTAAATGGGAGCTCAATTGACAGGCATCACCAAGTCTTCAAGGAGGACTGAGTTCTCAGGGGAG
AACTGGGAATGGGGCCAGGGTGCAAAATGCTTTGCCATCTGTAGGTAGACACACAGATCGCTCAGGGCACTGA
GAGATCCCAGAAGGTAACGTTAATGTTTTAGTCATTGTGTGTCTTTGTTGCTGCCAATGTCTTTGGACTGTAA
TCAGTGATCCACACCTCCCAGGATCCAGTGCTCCCTCTCAGCTCAGTCTCCCTCTCTCCCTGTCTGCAATCC
ATCCCAGCTCCTCAGCATGGCCTCAGTGGGCGCACCCATGCCTCCCGCAGTCCAGGTGAGCAGGGGAGCAACTGA
GCAGGAAGAGGATGGATCAACAAGGTACGGGGAATAGGGGACCCACGGGGTGTGACCTGCTTGCTAGAGAACT
GTGAACATGTGGCTCTGGATAGAGTGACTGCTGCTCCATATTAGCTTCCAGAGGGTGAGTGAGGGACAGAATATT
TCCTTCATAATGGTCATGGGTGAATGCTTTCTGCTGTAAGTGTCTTTTAGAGTAGGAATCAGCATAGTGGGATGC
CCAGCAGGCACAAACCATGGGTCCAGGGAGTCTCAGCGGGGAACCTTCTATCAGTATCAATAACCATTTGGAAGGAG
AAATGATTTCATGTGTGAAAAAATTCTCAGATCCATCAATAAATTTTTTTCAG

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FIGURE 3911

MKEILCGTNEKEPPTTEAVAQLAQELYSSGLLVTLIADLQLIDFEGKKDVTQIFNNILRRQIGTRSPTVEYISAHP
HILFMLLKGYEAPQIALRCGIMLRECIRHEPLVKIILFSNQFRDFFKYVELSTFDIASDAFATFKDLLTRHKVLV
ADFLEQNYDTIFEDYEKLLQSENYVTKRQSLKLLGELILDRHNFAIMTKYISKPENLKLMMNLLRDKSPNIQFEA
FHVFKVVASPHKTQPIVEILLKNQPKLIEFLSSFQKERTDDEQFADEKNYLIKQIRDLKKTAP

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FIGURE 3912

CACAAAGGCACCAAACCACAAAACGTCACACGTAAACATCATACGTGGCAACCACAAGCCAATCAGTTGGATATT
TCATTTCATTGGTATACATATGGACTGTAAGGTGTCTTTTCAGGTTGCAGAAAAGATCGAAAAAGGACATGTGCAC
TCTGCCCCAAAGATGTCTGAATATAATGTCCTGTACTTTGCACAATCAGAGAATATAGCTGCTCATGAGAATTGTT
TGCTGTATTCTTCAGGACTTGTGGAATGTGAGGATCAGGATCCACTTAATCCTGATAGAAGTTTTGATGTGGAAT
CAGTAAAGAAAGAAATCCAGAGAGGAAGGAAGTTGAAATGCAAATTTTGTCTATAAAGAGGAGCCACCGTGGGAT
GTGATTTAAAAAACTGTAACAAGAATTACCACTTTTTCTGTGCCAAGAAGGACGACGCAGTTCCACAGTCTGATG
GAGTTCGAGGAATTTATAAACTGCTTTGCCAGCAACATGCTCAATTCCCGATCATCGCTCAAAGTGCTAAATTTT
CAGGAGTGAAAAGAAAAAGAGGAAGGAAGAAACCCCTCTCAGGCAATCATGTACAGCCACCCGAAACAATGAAAT
GTAATACATTTCATAAGACAAGTGAAAGAAGAGCATGGCAGACACACAGATGCAACTGTGAAAGTTCCTTTTCTTA
AGAAATGCAAGGGAAGCAGGACTTCTTAAATTACTTACTTGAAGAAATATTAGACAAAGTTCATTCAATTCCAGAA
AAACTCATGGATGAGACTTACTTCAGAATCAGACTATGAAGAAATCGGGAGTGCACTTTTTGACTGTAGATTGTT
CGAAGACACATTTGTAAATTTTCAAGCAGCAATAGAGAAAAAAATTCATGCATCTCAACAAAGGTGGCAGCAGTT
GAAGGAAGAGATTGAGCTACTTCAGGACTTAAACAAACCTTGTGCTCTTTTCAAGAAAATAGAGATCTTATGTC
AAGTTCTACATCAATATCATCCCTGTCTTATTAGGGATTACCATTTCTAAGCCAAGAGTCATGTCAAATTGCAA
TCAGGCTCAAAACCAGAGACCAGGCTGTGAAATCCACACATCTTTAGAACTAGTCGTCTCCTCTTGGCCTCAGCA
GCTCTTCCCTGTTCTTACTGGTTGACATTTTGATCACTCTTTCACACTCTTGTGTTTTTGTCTACTGTCACAC
TCCCAGCACCTAGTATGCTCAGTAAATGTTTGTGGAATAAGTGCATAAAATGTTCTTAACCTTTGATTCTACTTA
CAGCCCATGATAGCCTCTTAGATATAATAAATTTGGATTATACTAAAA

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FIGURE 3913

MEKRTCALCPKDVEYNVLYFAQSENIAAHENCLLYSSGLVECEDQDPLNPDRSFDVESVKKEIQRGRKLKCKFCH
KRGATVGC DLKNCNKNYHFFCAKKDDAVPQSDGVRGIYKLLCQQHAQFP IIAQSAKFSGVKRKRGRKKPLSGNHV
QPPETMKCNTFIRQVKEEHGRHTDATVKVPFLKKCKGSRTS

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FIGURE 3914

TTGCTTTCCTCTGCCGCATGGTCCTGGGCCGTTGGCGTCGGAAGCCTGAAGCATCGGCGCTGAGTGGGAGCTGGG
GGCCGAGGCTGGCGGTTTCGCTGCTGCTGTGCGCCGCGCTGCTGGCGGCGGGCTGCGCCCTGGGCCTGCGCCTGGG
CCGCGGGCAGGGGGCGGCGGACCGCGGGGCGCTCATCTGGCTCTGCTACGACGCGCTGGTGCACTTCGCGCTGGA
AGGCCCTTTTGTCTACTTGTCTTTAGTAGGAAACGTTGCAAATTCGGATGGCTTGATTGCTTCTTTATGGAAAGA
ATATGGCAAAGCTGATGCAAGATGGGTTTATTTTGATCCAACCATTTGTGTCTGTGGAAATTCTGACCGTCGCCCT
GGATGGGTCTCTGGCATTGTTCCCTCATTTATGCCATAGTCAAAGAAAAATATTACCGGCATTTCTGCAGATCAC
CCTGTGCGTGTGCGAGCTGTATGGCTGCTGGATGACCTTCCTCCCAGAGTGGCTCACCAGAAGCCCCAACCTCAA
CACCAGCAACTGGCTGTACTGTTGGCTTTACCTGTTTTTTTTTAAACGGTGTGTGGGTCTGATCCCAGGACTGCT
ACTGTGGCAGTCATGGCTAGAACTCAAGAAATGCATCAGAAAGAAACCAAGTTCAGTGAAGAAGTTTCAGTGAAC
TTTCAAAACCATAAACACCATTATCTAACTTCATGAACCAGAATGAATCAAATCTTTTGTGTTGGCCAAAATGTA
ATACATTCCAGTCTACACTTTGTTTTTGTATTGTTGCTCCTGAACAACCTGTTTCAAATTGGTTTTAAGGCGACC
AGTTTTTCGTTGTATTGTTGTTCAATTAAATGGTGATATAGGGAAGAGAACAAATTGAATTGTAAATAATAAA
ATGTTTAAATTATACAAAAAAAAAAAAAAAAAAAA

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FIGURE 3915

MGAEWELGAEAGGSLLLCAALLAAGCALGLRLGRGQGAADRGALIWLCDALVHFALEGPFVYLSLVGNVANS DG
LIASLWKEYGKADARWVYFDPTIVSVEILTVALDGSALFLIYAIVKEKYRHF LQITLCVCELYGCWMTFLPEW
LTRSPNLNTSNWLYCWLYLFFFNGVWVLIPGLLLWQSWLELKKMHQKETSSVKKFQ

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FIGURE 3916

GCCATTTTGTATGCCAAGAGGGCCAGTGTCTTCGTCAAATTACAGAAGCCAAATGCAGCCATCCGAGACTGTGAC
AGAGCCATTGAAATAAATCCTGATTGAGCTCAGCCTTACAAGAGGCGGGGAAAGCACACAGGCACAGAAAATTG
CAGAACATCAGAGAAAGTATGAGCGAAAACGTGAAGAGTGAGAGATCAAAGAAAGAATAGAACGAGTTAAGAAGG
CTCGAAAAGAGCATGAGAGAGCCCAGAGGGAGGAAGAAGCCAGATGACAGTCAGGAGCTCAGTATGGCTCTTTTC
CAGGTGGCTTTTCTGGGGGAATGCCTGGTAATTTTCTGGAGGAATGGCTGGAATGGGAGGGGGGCATACCTGGAA
TGGCCGGAATGCCTGGACTCAATGAAATTCTTAGTGATCCAGAGGTTCTTGCAGCCATGCAGGATCCAGAAGTTA
TGGTGGCCTTCCAGGATGTGGCTCAGAACCCAGCAAATATGTCAAAGTACCAGAGCAACCCAAAGGTTATGAATC
TCATCAGTAAATTGTCAGCCAAA

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FIGURE 3917

GCCGACGTAGACCCTGCTCTGCACGCCAGCCCGCCCGCACCCACCATGGCCACAGTTCAGCAGCTGGAAGGAAGA
TGGCGCCTGCTGGACAGCAAAGGCTTTGATGAATACATGAAGGAGCTAGGAGTGGGAATAGCTTTGCAAAAAATG
GGCGCAATGGCCAAGCCAGATTGTATCATCACTTGTGATGGCAGAAACCTCACCACAAAAACCGAGAGCACTTTG
AAAACAACACAGTTTTTCTTGTACCCTGGGAGATGAGTTTGAAGAAACCACAGCTGATGGCAGAAAAACACAGACT
GTCTGCAACTTTACAGATGGTGCATTGGTTTCAGCATCAGGAGTGGGATGGGAAGGAAAGCACAATAACAAGAAAA
TTGAAAGATGGGAAATTAGTGGTGGAGTGTGTCTGAACAATGTCACCTGTACTCGGATCTATGAAAAAGTAGAA
TAAAAATTCCATCATCACTTTGGACAGGAGTTAACTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAAATCTCCA
TACTGTTTCTTTCTTTTTTTTTTTTTCATTACTGTGTTCAATTATCTTTATCACAAACATTTTACATGCAGTTATTTT
AAAGTGTGTTGGATTAAATTAGGATTATCCCTTTGTTTAATAAAT

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FIGURE 3918

TTTCTGCCCGTGACGCCGCTGAAGAAGCATCGTTAAAGTCTCTCTTCACCTTGCCGTCATGCTAAGTCAGCGT
CTCCAAAAGAGCCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTTGAAACAACATGATGAGAGCCTGA
GGAGCCATTTTGAGCAATGGGGAACGCTCACAGACTGTGTGGTAATGAGAGATCCAAACACCAAGCGCTCCAGGG
GCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTATGAATACAACGCCACACAAGGTGGATG
GAAGAGTTGTGGAACCAAAGAGAGCTGTCTCCAGAGAAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAA
AGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAAA
TTGAAGTAATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCCTTTGTAACTTTGACGACC
ATGACTCCGTGGATAAGATTGTCATTCAGAAATACCATACTGTGAAGGGCCACAACCTGTGAAGTTAGAAAAGCCC
TGCCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGGGGTTCTGGAACTTTGGTGGTGGTC
GTGGAGATGGTTTCGGTGGGAATGACAACTTTGGTCGTGGAGGAACTTCAGTGGTCGTGGTGGCTTTGGTGGCA
GCTGTGGTGGTGGTGGATATGGTGGCAGTGGGGATGGCTATAATGGATTGGTAATGATGGAAGCAATTTTGGAG
GTGGTGGAAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAAT
TTGGAGGCAGAAGCTCTGGCCCTATGGCGGTGGAGGCCAATACTTTGCAAAACCACAAAACCAAGGTGGCTATG
GCCTTTCCAGCAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAATTAGGAAACAAAGCTTAGCAGGAGAGGA
GAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTTGTGAACTCAGCCAAGCACAGTGGTGGCAGGGC
CTAGCTGCTACAAAGAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAAAGTTCGAGGACTGTATTTGT
GACTAATTGTATAACAGGTTATTTTAGTTTCTGTTCTGTGGAAAGTGTAAAGCATTCCAACAAAGTGTTTTAATG
TAGATTTTTTTTTTGCACCCATGCTGTTGATTGCTAAATGTAATAGTCTGATTGTGACGCTGAATAAATGTCT

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FIGURE 3919

MSKSASPKEPEQLRKLF IGGLSFETTDESLRSHFEQWGLTDCVVMRDPNTKRSRGFGFVITYATVEEVDAAMNTT
PHKVDGRVVEPKRAVSREDSQRPGAHLTVKKIFVGGIKEDTEEHHLRDYFEQYGKIEVIEIMTDRGSGKKRGFAF
VTFDDHDSVDKIVIQKYHTVKGHNCEVRKALPKQEMASASSSQRRRGSGNFGGGRGDGFGGNDNFGRGGNFSGR
GGFGGSCGGGGYGGSGDGYNGFGNDGSNFGGGGSYNDFGNYNQSSNFGPMKGGNFGGRSSGPYGGGGQYFAKPQ
NQGGYGVSSSSSSYGSGRRF

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FIGURE 3920

ACCTTGCCGTCATGTCTAAGTCAGCGTCTCCAAAAGAGCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGA
GCTTTGAAACAACCTGATGAGAGCCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCACAGACTGTGTGGTAATGA
GAGATCCAAACACCAAGCGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTA
TGAATACAACGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCTGTCTCCAGAGAAGATTCTCAA
GACCAGGTGCCCACCTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAA
GAGATTATTTTGAACAGTATGGAAAAATTGAAGTAATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGG
GCTTTGCCTTTGTAACTTTGACGACCATGACTCCGTGGTGGCTTTGGTGGCAGCTGTGGTGGTGGTGGATATGG
TGGCAGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTT
TGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGG

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FIGURE 3921

TGTAAGTGGAAACCAAAAGAGAGCTGTTTCTAGAGAGGATTCTGTAAAGCCCGTTGCCCATCTAACAGTGAAGAAAAT
TTTTGTTGGTGGTATTAAAGAAGATACAGAAGAATATAATTTGAGAGACTACTTTGAAAAGTGTAGCAAGATTGA
AACCATAGAAAGTTATGGAAGACAGGCAGAGTGGAAAAAAGAGAGGATTTGCTTTTGTAACTTTTGATGATCATGA
TATAATTGATAAAATTGTTGTTTCAGAAATACCACACTATTAATGGGCATAATTGTGAAGTGAAGAAAGGCCCTTTC
TAAACAAGAGATGCAGTCTGCTGGATCACAGAGAGGTCATGGAGGTGGATCTGGCAATTTTATGGGTGCGGGAGG
AAACTTTGGAGGTGCTGGAGGTAATTTTGGCCTTGGTGGAACTTTGGTGGAAAGAGGAGGCTATGGTGGTGGAGG
TGGTGGCAGCAGAGGAAGTTATGGAAGAGGTGATGGTGGATATAATAGATTTGGACGTGACGGTGGCAACTATGG
TGGTGGTCCTGGTTATAGTAGTAGAGGGGGCTATGGTGGTGGTGGAAACAGGATATGGAACCAAGGTGGTGGATA
TGGTGGAGGTGGTGGAGGATATGATGGTTACAATGAAGGAGGAAAATTTTGGCGGTGGTAACTATGGTGGTGGTGG
GAACTATAATGATTTTGGAAATCATAGTGGACAACAGCAATCAAATTATGGACCCATGAAAGGGGGCAGTTTGG
TGGAGAAGCTCGGGCAGTCCCTATGGTGGTGGTTATGGATCTGGTGGTGGAAAGTGGTGGATATGGTAGCAGAAG
GTTCTAAAAACAGCAGAAAAGGGCTACAGTTCTTAGCAGGAGAGAGAGCAAGGAGTTGTCAGGAAAGCTGCAGGT
TACCTCGAGAGAGTTGTCCCAAATGCATTAGAGGAACTGTAAAAATCTGCCACAGAAGGAACAATGATCCATAGT
CAGAAAATTTACTGCAGCTTAAACAGGAAACCCCTTCTTGTTTCAGGACTCTCATAGCCACAGTTTGCAAAAAGTGC
AGCTATTGATTAATGCAATATAGTGTCAACTAGATGTAGATTCCTGAGGTCTTTTATCTGTTGTAGCTTTGTCTT
TTCTTTTTCTTTTCATTACATCAGGTATATTGCCCTGTAAATTGTGGTAGTGGTACCAGGAATAAAAAATTAAG
GAATTTTAACTTTTCAA

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FIGURE 3922

MEDRQSGKKRGFAFVTFDDHDIIDKIVVQKYHTINGHNCEVKKALSKQEMQSAGSQRGHGGGSGNFMGRGGNFEGG
AGGNFGLGGNFGGRRGGYGGGGGSRGSYGRGDGGYNRFGRDGGNYGGGPGYSSRGGYGGGGTGYGNQGGGYGGGG
GGYDGYNEGGNFGGGNYGGGGNYNDFGNHSGQQQSNYGPMKGGSFGGRSSGSPYGGGYGSGGGSGGYGSRRF

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[illegible]

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FIGURE 3924

CGCCGACGCAGACCACTCTCTGCATGCCAGCCCCGCCGCCACCCACCATGGCCACAGTTCAGCAGCTGGAAGGAAG
ATGGCGCCTGGTGGACAGCAAAGGCTTTGATGAATACATGAAGGAGCTAGGAGTGGGAATAGCTTTGCGAAAAAT
GGGCGCAATGGCCAAGCCAGATTGTATTGTCACTTGTGATGGCAAAAACCTCACCATAAAAACTGAGAGCACTTT
GAAAACAACACAGTTTTCTTGTCCCTGGGAGAGAAAGTTTGAAGAAACCACAGCTGATGGCAGAAAACTCAGAC
TGTCTGCAACTTTACAGATGGTGCAATTGGTTCAGCATCAGGAGTGGGATGGGAAGGAAAGCACAATAACAAGAAA
ATTGAAAGATGGGAAATTAGTGGTGGAGTGTGTCATGAACCATGTGCGCTGTACTCGGATCTATGAAAAAGTAGA
ATAAAAATTCCATCATCACTTTGGACAGGAGTTAACTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAATCTCC
ATACTGTTTCTTTTTTTTTTTTCCATTACTGCGTTCAATTATCTTTATCACGAACATTTTACATGCAGCTATTTT
AAAGTGTGTTGGATTAATTAGGATCATCCCTTTGGTTAATAAATAAATGCGTTTGTGCTAATAAAAAAAGAAAA
GAAAA

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FIGURE 3925

GCGGTGGCAGCCGCTCGCTGAGGTAGTCTCTCGCGGCGCCGGGGATCCCTGAACACAGACAGCGCGGGACTGAGA
AGGAAAGCTTCTTTCTGGGCAGCCAGAGCCGCAAAGGTGGAGCCGCGTTGGCGCCCTCCGCGGGACCAGCGCCTC
GGATGCGGGCGGAGCGCGGGGGGCGCGGCTGCGGGAGCGCGAAGCGGGGGGCCAGGGGCGCCTCATGTGAGAGC
CGCGGGACCTGCAGCCGCCCGCTCCCGGAGCACGGGGTGGTGTGTGGGGGAAGCCGCCCCGGCAGCAGGATG
AAACGAGGAGGAAGAGATAGTGACCGTAATTCATCAGAAGAAGGAAGTGCAGAGAAATCCAAGAACTGAGGACT
ACAAATGAGCATTCTCAGACTTGTGATTGGGGTAATCTCCTTCAGGACATTATTCTCCAAGTATTTAAATATTTG
CCTCTTCTTGACCGGGCTCATGCTTCACAAGTTTGCCGCAACTGGAACCAGGTATTTACATGCCTGACTTGTGG
AGATGTTTTGAATTTGAACTGAATCAGCCAGCTACATCTTATTTGAAAGCTACCCATCCAGAGCTGATCAAAACAG
ATTATTTAAAGACATTCAAACCATCTACAATATGTCAGCTTCAAGGTGGACAGCAGCAAGGAATCAGCTGAAGCA
GCTTGTGATATACTATCGCAACTTGTGAATTGCTCTTTAAAAACACTTGGACTTATTTCAACTGCTCGACCAAGC
TTTATGGATTTACCAAAGTCTCACTTTATCTCTGCACTGACAGTTGTGTTCGTAAACTCCAATCCCTGTCTTCG
CTTAAGATAGATGATACTCCAGTAGATGATCCATCTCTCAAAGTACTAGTGCCCAACAATAGTGATACACTCAAG
CTGTTGAAAATGAGCAGCTGTCTCATGTCTCTCCAGCAGGTATCCTTTGTGTGGCTGATCAGTGTACGGCTTA
AGAGAACTAGCCCTGAACTACCACTTATTGAGTGATGAGTTGTTACTTGCAATTGTCTTCTGAAAAACATGTTTGA
TTAGAACATTTGCGCATTGATGTAGTCAGTGAGAACTCTGGACAGACACACTTCCATACTATTTCAGAAAGAGTAGC
TGGGATGCTTTTCATCAGACATTCACCCAAAGTGAAGTCTAGTGATGATTTTTTTTTTATATGAAGAAGATTTGAC
CCCTTCTTTTCGCTATGAAATACCTGCCACCCATCTGTACTTTGGGAGATCAGTAAGCAAAGATGTGCTTGGCCGT
GTGGGAATGACATGCCCTAGACTGGTTGAACTAGTAGTGTTGCAAAATGGATTACGGCCACTTGATGAAGAGTTA
ATTGCGATTGCAGAACGTTGCAAAAATTTGTGAGCTATTGGACTAGGGGAATGTGAAGTCTCATGTAGTGCCCTT
GTTGAGTTTGTGAAGATGTGTGGTGGCCGCTATCTCAATTATCCATTATGGAAGAAGTACTAATTCCTGACCAA
AAGTATAGTTTGGAGCAGATTCAGTGGGAAGTGTCCAAGCATCTTGGTAGGGTGTGGTTTCCCGACATGATGCCC
ACTTGGTAAAACTGCATGATGAATAGCACCTTAATTTCAAGCAAATGTATTATAATTAAAGTTTATTTGCTGT
AGTTCTGATATAATTCTACTATTTTGTGGCAGAAAATTTGATATCTTCAGTCAGTATATGTAAAGATTGTTTAT
CGGAAGACCCATGAATGAGTTTTGGTCAGAAAATTCACCTGTTTTCCTTAGTGTAATAGCAGTCATATCTCCGAA
TTTTTTTTAATGTGGTTCCGATGTGAAATAACCAGTTATACGTATTAAACAGTTTACAGTCTAAAGGAAACAAAA
CCTATATGTTATAATATCCAAGAAGTACTAATAGGTTTTCTGAAATGTTATATTCTCTATGCATTTAAAAA
TGTAACCTTGACATTTTAGGGTCTTCAGTTACACATACACCTGTTATAAGGTGTTTAATATAGCTCAGGAAAGTG
AGCATTTTGTGAGAAAAATGAATATATCATATCTAATGGAAAAGATTGGATGAATGTTCTCAAATGTTACAAAGC
TGTTTAAAGAAAAAGGTATATATAAGTAATCAGAACCTTAGAAGACTGATAGATGTCACACAGTGGTATTATAG
AAGGATAATACAGAGCCAAGATCAAATTTAAAGACAATAAATGGAACAGAAGGGAGGCAGTGTGTTAGCTTTGTAT
AACTTTTAGGTTTGTCTGTAACTGCTAAACCATATACATTCTTTTGTGATATGTTATTATGTATGTGGCACT
TGAGGCACTGTATGTAAAGTAAGGAATGCTTTACTAGTTCTCCTTGGTTTTATCTTTGTTTAAACTAGCTTTAAA
GTATTAAACAATAATTGAAATGAAAAGCTTACCTATTTTAAAAAGCCAAATTTAAATAAATATAGAAGCTTTAAAA
TGTTTATCAGTTGTTTCCATGAAAGAATATTAGTTTCCAGTAAATTTTAGTGATGGCTCACTCACTTTTCTATTT
TGGAATTACATAGTTATGTAAGTAAATTTTAAAAATCATAAAGGGAGCACCATTGTACAGTCTAGCATAAACA
GCAAATTTTAAAGAGGACATATTTAAGTTCATAATCATATTTTTCAGTAAATATTGCTCAGTGAAGTGGAAAAC
TTAATAGAAAAATGTCTGCAGTTTTGTGATTGTTAATTTGGTTAAACCGATATTTTATATTATTTAAGTTAGGTA
ACATTTTATATTACTTTTCATATGAATAAAAGTAATCCATGCATTGTAGAGTCTATAAAATGTTGAGTTTAAAAAG
ATGATATAAACTTTGATGCTGGGCACTAGTGCTAGTAGATATTACTACCCTCCTGAGGGAAATCAGAAATGATTT
AACCCCGGTGGAATACATTAATCTTAAAGCGGCTCTTTTCAGTGGTGTGACTTTTAGATTGTGTCTCAGTGGTT
GAGGAAGCTAACAGTCTTAGATCTACTTTTAAACGGATGGCCTTCTTAAGAATAAAGCAAAGGTGATTTCTA
CATAATTTTGTCTTTCCAAAAGTGATGATATGCTCTCCTACAGCAACATATGAGAAGAAAAAGGCTTATCTAGA
TTCGAAAATTAACAGCAATTATAGTAATATATCCCTCCTTCTAAATAGTAAAAAGCTCTGATTGTACAAGAATT
ACCTGTGCTAGTCAAGTTGTTGTTTTCTTGAACAACCTTTGGAAAAATGGATTGACAGTACATAATCAGTTCT
ACTAACCAAAGCTTGATTTTGGAAATTTACTTTTTGTACAAATTGAATTATATAATGCTTAAAAACTTTGTAC
TTTATAAGCAAATGCATAGTACTTAATTTGTTTATACTGTAAAGTATATGTTAAATGCTTTTATCACTTTGAGA
ATAAAAAGTTACTAATGC

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FIGURE 3926

ACTGGCTGCTCTGAAAAGCCATCTTTGCATTGTTCTCCTTGCTCGCCGCAGCCGCCTCCGCCGCGCGCCTCCTC
CGCCGCCGCGGACTGCGGCAGCTTTATCGCCAGAGTCCCTGAACTCTCGCTTTCTTTTAAATCCCCTGCATCGGA
TCACCGGCGTGCCCCACCATGTCAGACGCAGCCGTAGACGCCAGCTCCGAAATCACCATCAAGGACTTAAAGGAG
AAGAAGGAAGTTGTGGAAGAGGCAGAAAATGGAAGAGACGCCCCTGCTAACGGGAATGCTAATGAGGAAAATGGG
GAGCAGGAAGCTGACAGTGAAGTAGATGAAGAAGAGGAAGAAGGTGGGGAGGAAGAGGAGGAGGAAGAAGAAGGT
GATGGTGAGGAAGAGGATGGAGATGAAGATGAGGAAGCTGAGTCACCTACGGGCAAGCGGGCAGCTGAAGATGAT
GATACGCGCTCTCCACCACCCAACCCAAACCATGAGAATTTGCAACAGGGGAGGAAAAAAGAACCAAAACTTCCA
AGGCCATGCTTTTTTTCTTAAAAGTACTTTAAAAAGGAATTTGTTTGTATTTTTTATTACATTTTATATTTT
ATACATATTGTTAGGGTCAGCCATTTTAAATGATCTCGGATGACCAAACCAGCCTTGGGAGCGTTCTGTCTTACT
TCTGACTTTACTTGTGGTGTGACCATGTTTATTATAAT

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FIGURE 3927

MSDAVDTSSEITTKDLQEKKEVVEEAENGRDAPANGNANEENGEQADNEVDEEEEEGGEEEEEEEGDGEEEDG
DEDEEAETATGKRAAEDDEDDTRSPPPNPNNHENLQQGRKKEPKLPRPCFFS

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FIGURE 3928

ACTGGCTGCTCTGAAAAGCCATCTTTGCATTGTTCTCTCTTGCTCGCCGCAGCCGCCTCCGCCGCGCGCCTCCTC
CGCCGCCGCGGACTGCGGCAGCTTTATCGCCAGAGTCCCTGAACTCTCGCTTTCTTTTAAATCCCCTGCATCGGA
TCACCGGCGTGCCCCACCATGTCAGACGCAGCCGTAGACGCCAGCTCCGAAATCACCATCAAGGACTTAAAGGAG
AAGAAGGAAGTTGTGGAAGAGGCAGAAAATGGAAGAGACGCCCCCTGCTAACGGGAATGCTAATGAGGAAAATGGG
GAGCAGGAAGCTGACAGTGAAGTAGATGAAGAAGAGGAAGAAGGTGGGGAGGAAGAGGAGGAGGAAGAAGAAGGT
GATGGTGAGGAAGAGGATGGAGATGAAGATGAGGAAGCTGAGTCACCTACGGGCAAGCGGGCAGCTGAAGATGAT
GAGGATGACGATGTCGATACCAAGAAGCAGAAGACCGACGAGGATGACTAGACAGCAAAAAAGGAAAAGTTAAAC
TAAAAAAAAGGCCGCCGTGACCTATTCACCCTCCACTTCCCGTCTCAGAATCTAAACGTGGTCACCTTCAAGTA
GAGAGGCCCGCCTGCCCACCGTGGGCAGTGCCACCCACAGATGATACGCGCTCTCCACCACCCAACCCAAACCAT
GAGAATTTGCAACAGGGGAGGAAAAAGAACCAAACTTCCAAGGCCATGCTTTTTTCTTAAAAGTACTTTAAA
AAGGAAATTTGTTTGTATTTTTTATTTACATTTTATATTTTTATACATATTGTTAGGGTCAGCCATTTTAAATGA
TCTCGGATGACCAAACAGCCTTGGGAGCGTTCTGTCTACTTCTGACTTTACTTGTGGTGTGACCATGTTCAAT
ATAATCTCAAAGGAGAAAAAACCTTGTAAGGAGCAAAATGACAACAGAAAAACAATCTTATTCTGAGCATT
CCAGTAACTTTTTTGTGTATGTACTTAGCTGTACTATAAGGAGTTGGTTTGTATGAGATGGTTAAAAAGGCCAAA
GATAAAAGGTTTATTTTTTTTCTTTTTTGTCTATGAAGTTGCTGTTTATTTTTTTTGGCCTGTTTGATGTATGT
GTGAAACAATGTTGTCCAACAATAAACAGGAATTTTATTTTGTCTGAGTTGTTCT

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FIGURE 3929

MSDAAVDASSEITIKDLKEKKEVVEEAENGRDAPANGNANEENGEQADSEVDEEEEEEGGEEEEEEEEEGDGEEED
GDEDEEAESPTGKRAAEDDEDDVDTKKQKTDEDD

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FIGURE 3930

ATGGCGGCGGCCGCGGCGGAGCAGCAACAGTTCTACCTGCTCCTGGGAAACCTGCTCAGCCCCGACAATGTGGTC
CGGAAACAGGCAGAGGAAACCTATGAGAATATCCCAGGCCAGTCAAAGATCACATTCCTCTTACAAGCCATCAGA
AATACAACAGCTGCTGAAGAGGCTAGACAAATGGCCGCCGTTCTCCTAAGACGTCTCTTGCTCTCTGCATTTGAT
GAAGTCTATCCAGCACTTCCCTCTGATGTTTCAGACTGCCATCAAGAGTGAGCTACTCATGATTATTCAGATGGAA
ACACAATCTAGCATGAGGAAAAAAGTTTGTGATATTGCGGCAGAACTGGCCAGGAATTTAATAGATGAGGATGGC
AATAACCAGTGGCCCGAAGGTTTGAAGTTCCTTTTTGAATTCAGTCAGCTCTCAAAATGTGGGACTGCGGGGAAGCT
GCCCTTCACATTTTCTGGAACTTTCTGGAATTTTGGGAACCAGCAACAACACTATTTAGATGTCATCAAAACGA
ATGTTAGTTTCAGTGATGCAAGATCAGGAACACCCGTCGATCAGGACGTTATCTGCTAGAGCTACAGCTGCATTT
ATACTTGCAAATGAGCATAATGTTGCTCTGTTCAAACATTTTGCAGACTTGCTACCGGGATTCTACAGGCGGTA
AATGACTCGTGCTACCAGAATGATGATTCTGTCTTAAATCCCTCGTTGAGATTGCAGATACTGTTCCAAAGTAT
TTGCGTCTCACTTGGAAGCAACTCTACAGCTAAGTCTAAAGTTGTGTGGAGACACTAGCCTCAACAATATGCAA
CGCCAGCTTGCCCTTGAAGTGATCGTCACCTCTCTGAGACTGCAGCTGCTATGTTAAGAAAAACATACCAATATT
GTTGCACAGACTATTCCTCAGATGTTAGCAATGATGGTTGATTGGAAGAAGATGAGGACTGGGCAAAATGCAGAT
GAACTAGAAGATGATGATTTTGACAGCAATGCAGTTGCAGGCGAGAGTGCTCTAGATCGAATGGCTTGCGGACTT
GGTGGAAAGCTCGTTCTGCCGATGATCAAGGAACACATTATGCAAATGCTTCAAAATCCTGACTGGAAATACCGG
CATGCAGGATTGATGGCCTTATCTGCCATTGGTGAAGGGTGCCACCAGCAAATGGAAGGAATTCTAAATGAGATC
GTAAATTTTGTTTTACTTTTTCTCCAGGATCCTCATCCAAGAGTAAGGTATGCAGCCTGTAATGCCGTGGGACAG
ATGGCTACAGATTTTGACCTGGTTTCCAAAAGAAATTTTCATGAGAAGGTGATTGCAGCTCTGCTGCAGACCATG
GAAGACCAAGGCAATCAACGTGTGCAGGCCCATGCAGCTGCTGCCCTCATTAACTTTACTGAAGACTGTCCCAAG
TCACTACTTATTCCATACTTGGATAATTTGGTGAAACATCTGCATTCCATTATGGTACTGAAGCTTCAAGAGCTG
ATTGAGAAAGGCACCAAGTTAGTTTGGGAACAAGTTGTGACATCCATTGCATCAGTTGCCGATACTGCAGAAGAA
AAATTTGTCCCTACTATGATTTATTTATGCCATCACTGAAGCACATCGTTGAGAATGCCGTTCAAAAAGAACTG
AGACTTCTGAGAGGAAAACTATTGAATGCATTAGCCTCATTGGTCTGGCTGTTGGGAAGGAAAAATTTCATGCAG
GATGCATCAGATGTGATGCAGCTTTTGTAAAGACCCAGACAGACTTCAATGATATGGAAGATGATGATCCTCAG
ATCTCTTACATGATCTCAGCATGGGCCAGAATGTGCAAAATCCTTGGAAGAAATTCAGCAATACCTTCCAGTG
GTTATGGGGCCTTTAATGAAGACGGCTTCAATTAAGCCCGAAGTAGCCCTTTTAGATACCCAAGACATGGAGAAT
ATGAGTGATGATGATGGTTGGGAATTTGTGAACCTTGAGATCAGCAAAGCTTTGGTATTAAAACATGCAGGACTA
GAAGAAAAATCAACTGCTTGCCAGATGTTGGTTTGCTATGCTAAGGAGTTAAAGGAAGCTTTGTGGAGTACACC
GAACAGGTTGTCAAACCTGATGGTCCCTTTACTGAAATTTTATTTCCACGATGGTGTTTCGAGTGGCAGCAGCGGAA
TCCATGCCTCTTCTCCTGGAGTGTGCAAGAGTCCGTGGTCTGAGTATCTCACACAGATGTGGCATTATATGTGT
GATGCTCTAATTAAGGCCATTGGTACAGAACCAGATTGAGACGTCTCTCAGAAATAATGCATTCTTTTGCAAAG
TGCAATTGAAGTAATGGGAGATGGATGCCTTAATAATGAACACTTTGAAGAACTGGGAGGTATATTGAAAGCAAAG
CTTGAAGAACATTTTAAAAATCAAGAATTACGACAAGTTAAAAAGACAAGATGAAGACTATGATGAACAGGTGAA
GAGTCACTACAAGATGAGGATGATAATGATGTTTATATTCTGACCAAAAGTGTGAGATATTTTACACTCAATATTC
AGTAGCTACAAAGAAAAGGTGTTACCATGGTTTGAACAGCTGCTTCCATTAATTGTCAACCTCATTGTGCCACAT
AGACCATGGCCAGACAGACAATGGGGATTATGCATCTTTGATGATGTGATAGAACACTGTAGTCCAGCCTCATTT
AAATACGCAGAAATTTTCTTAAGACCAATGCTCCAATATGTATGTGACAACAGCCAGAAAGTCAGGCAAGCAGCT
GCATATGGCCTGGGAGTCATGGCACAGTACGGTGGAGATAATTATCGCCCTTTTGTACAGAAGCACTTCCCTG
CTGGTAAGAGTTATTGAGTCTGCGGATTCTAAGACCAAGAAAAATGTCAATGCTACAGAGAAGTGCATCTCAGCA
GTAGGGAAAAATCATGAAGTTCAAGCCTGACTGTGTAAACGTTGAAGAGGTCTTCCACACTGGTTGTCTTGCTT
CCACTACATGAAGATAAAGAAAGCTGTTTCAGACTTTCAATTATCTGTGTGACCTGATTGAAAGTAATCATCCA
ATTGTTCTTGCCCAAAACAATACCAATCTGCCCAAAATATTTAGTATAATTGCGGAAGGAGAAATGCACGAGGCA
ATTAAACATGAAGATCCTTGTGCCAAACGCTGCGCAATGTGCTTCGCCAAGTACAGACTTCTGGAGGACTGTGG
ACTGAGTGCATAGCACAGCTCAGTCTGAGCAGCAGGCCGCCATTGAGGAGCTCTGAACTCTGCGTGA

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FIGURE 3931

ATGTTACACCAGCACCGGCTCCAGTGGGCTCTGTGAGTACCGGCCTCCGCCATCCTGGCTGCCCCCTACACGCCAC
CCTAGGCACCTCTTTGAGGAGGCTGGGGCAGCGGGGACCCCTCGGGTTTGCCGGAGGTGGTGGGGCCGACCCCTCCA
GACCCGCGTCCGAACCCCTGCTAGTTCCCGGTCTTGGGGGTGAGCGGAAACCGCCCCCATTTGCGCCTGGAGGGGC
GAATGGGGACAAAGCCCCGCCGCCGCCGCCGACCCACCTGGTATCCCCAGGTGCTCTGCCAGGAGTCTCTTGG
GGCCGCTGCAAGTGGGCAGGTGCCCTGGTGTCTCGTGGGCCGGCCCCAGGCCCTTTGCGGAGCGTGTGCCGCGC
TGAAGGAAGGGGCCGTCCCCCTTACCATGCCCAATCTTTTAGGCTTGGGGGACCGAACTAACTCCCCCGCCCC
CACTTGCAAAGTTTACAGCTCCGCTTTAGAAGCTGACCTCTCAGTTTCACTTGGATGTGTTTTCTTCTTCACTCTCC
AAGAAGAGTTTTTAGACAAACACACACTGATGAGAGTGCTTTCAAGTGGAGGGAAGTTAGGAAGTCGTGGCGAGG
GAGCGCAGCTGTGCTGCTGGATGTTGCTGTTTTCTGGCGTGTAGCGGTGGTCAGCAGACAAGGCGCCTCTGTC
GAAGAGCCTTCTGCTGGTCCCCAGTGCCCTCTCCCTCCTGCTCGCCCTCCTCCTGCTCACTGCCAGAAGCTCTT
TGTGTATGACCTTACGCACTCAAGAACGACTTCCAGCCTGGCACCTGTGTTTGTCTGTGTTGTACCATTTTACT
GCTCCATACCAAGAGTCCAAGTGGCACAATTTCTGGGTCCGTTGTCCATCACAACAAGACATTGATTTATATAT
TGGGACTGCAGCTTTTACCTCTGGTTCCTACATCTGGATTGTAGCCATAAGTGGACTTATGTCCGGTCTGTGCT
ACGACAGCAAAATGTTCCAGGTGCATCAGGTGCTCTGCATCCCCAGCTGGATGGCAAAATCTTTTCTTGGACAC
TTGAACCCATCTTCTCTTCTTCCAGAACCCACCGAGCGAAGCCAGAATTGGGATGGGAGCCACGCTGGACATCCAGA
GACAGCAGAGAATGGAGCTGCTGGACCGGACGCTGATGTTCTCTCAGTTTGCACAAGGGAGGCGACAGAGACAGC
AGCAGGGAGGAATGATCAATTGGAATCGTCTTTTCTCTCTTACGTGAGCGACAAAACGTAACCTATCAGGGCG
GTCGGCAGTCTGAGCCAGCAGCGCCCCCTCTAGAAGTTTCTGAGGAACAGGTGCGCCGGCTCATGGAGATGGGAT
TTTCCAGAGGTGATGCTTTGGAAGCCCTGAGAGCTTCAAACAATGACCTCAATGTGCGCCACCAACTTCTGCTGC
AGCACTGATAGTCCCAGGCCAACACTGGGACCGGACCGGCAGCCGAGTGACAGTGCGTGGTCCCCACCATCAGAT
CAGCCCGGGGACCGAGCATCTCTGGTGTGATGTTCTTGTGGGAAGAGGGAGGTTCCACCGCACCCCTGCCCTCA
ACCGCAAGACTGTTGCCGTTTTAGTGTGGAGATAAGTTTGCCATTACATTAGCATGTATTTTCTATCTATATTTT
TTATTGGGCATTTTCCCTAGGTTGGAGAGTCAGCACTCGTTTTGAATGTGTTTAAATGCATTAAATGGAAGAT
TTCTGCAGGCAGTTGAATGGCACTCCAGATGGGGAATTGCTGTAACCCCTTTACTGTAACATGTCATCTCCTGCG
TCGTGATGGGGAGAGGGTAATGTTACTTCACAAAGGACATGTCAGATCCTTCTTCATGGACTTTTTTAGTTACTG
TTTTTCTCTCAAATTTGTTTTCGAATCTCCTGGGAGTGAGGGAGAAACAGGGAGCTGAATCCTCCCCCAAGCTG
TTCCAGGCCAGAGGACTCTGCAGTACCTTCTCCTACATCTAGTAACAAAGAATGGTGATAACCATGCACTGGTTT
AAGGTTCTGGAGTTCTCCATGAAACTTGGGTTAATTTTGCTCAGAGTATCCAGAGTTAGCCACTAGGCTGCGGGT
GAAATGGGATGGAGAAGAACAACAGCAGGCTTCTGAGGCCACATGGGCTGACTAGGGCACTCTGTGGCTGGCCT
GGCATGGGCTCAGCCCAGGAAGAGGAGAAACGATCCCTTGCCCTGCCCCCTCCCTGTGGCAGGGCTAACTGCCTGGC
CCTCCTGGCTCGCAGCCAGCCAGCCCCCTGGCAGCAGGTTCTCCTCAGGGCTTGGGTCTTCAACCTGTGGCGACA
GGAGGCAGGGCAGACTGTGGAGGACAGGATGCAGGTGAGGGAGAGGGAAGGCAGGGGTGGACCGCCATGAGCATG
AAAAGACCCGAAGCAAGTTGACTCTTGCAATGTGCAACTGTTATGTTCTGCAAAATGAGCAACGATGTATCAAAT
TGATGCAAAATTTAGATGTTGATACTTACAATAAAGTTTTTAATGTGTTTTACTCTTC

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FIGURE 3932

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTTCGTGCACTAAGTGTGCCCCGATGCGTGCCCAAGGACAACGCCATTAAGAAATTCGTCATTTCGAAAC
ATAGTGGAGGCCGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCCGCAAG
GACCGAACACCCCCACCTCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

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FIGURE 3933

AGGTTACCAATGAAGATCATAGCAATGTCGCCTGCTGGCTTCTGGCAAAGCAGAAAGAAACCGATACGATCTCCTGG
TGACGTCGCTTGGCGTTGTATGGGTGGTGCTTCACTTTGCCCTCCTGAATGCATATACTTACATGATGGGCGCTT
GTGTGATTGTATTTAGGTTTTTCTCCATCTGTGGAAAACATGTAACGCTAAAGATGCTCCTCTTGACAGTGGTTCG
TCAGCATGTACAAGAGCTTCTTTATCATAGTAGGCATGTTTCTTGTCTGTGTGTACGCTTTTGTCTGGAGTTG
TTTTATTTGGTACTGTGAAATATGGGGAGAATATTAAACAGGCATGCAAAATTTTCTTCGGCTGGAAAAGCTATTA
CCGTACTGTTCCGAATTGTCACAGGTGAAGACTGGAACAAGATTATGCATGACTGTATGGTTCAGCCTCCGTTTT
GTACTCCAGATGAATTTACATACTGGGCAACAGACTGTGGAAATTATGCTGGGGCACTTATGTATTTCTGTTTCAT
TTTATGTCATCATTGCCTACATCATGCTAAATCTGCTTGTAGCCATAATTGTGGAGAATTTCTCCTTGTTTTATT
CCACTGAGGAGGACCAGCTTTTAAGTTACAATGATCTTCGCCACTTTCAAATAATATGGAACATGGTGGATGATA
AAAGAGAGGGGGTGATCCCCACGTTCCGCGTCAAGTTCCTGCTGCGGCTACTGCGTGGGAGGCTGGAGGTGGACC
TGGACAAGGACAAGCTCCTGTTTAAGCACATGTGCTACGAAATGGAGAGGCTCCACAATGGCGGCGACGTCACCT
TCCATGATGTCCTGAGCATGCTTTCATACCGGTCCGTGGACATCCGGAAGAGCTTGCAGCTGGAGGAACTCCTGG
CGAGGGAGCAGCTGGAGTACCCATAGAGGAGGAGGTGGCCAAGCAGACCATCCGCATGTGGCTCAAGAAGTGCC
TGAAGCGCATCAGAGCTAAACAGCAGCAGTCGTGTCAGTATCATCCACAGCCTGAGAGAGAGTCAGCAGCAAGAGC
TGAGCCGGTTTCTGAACCCGCCCAGCATCGAGACCACCCAGCCAGTGGAGACACGAATGCCAACAGTCAGGACA
ACAGCATGCAACCTGAGACAAGCAGCCAGCAGCAGCTCCTGAGCCCCACGCTGTGCGATCGAGGAGGAAGTCGGC
AAGATGCAGCCGACGCAGGGAACCCAGAGGAAATTTGGGCGAGTGGCGTCTGCCCTCAGCCCCAAAACCAATAA
GCCATTCAAGTGTCTCAGTCAACTTACGGTTTGGAGGAAGGACAACCATGAAATCTGTGCTGTGCAAAATGAACC
CCATGACTGACGCGGCTTCTGCGGTTCTGAAGTTAAGAAGTGGTGGACCCGGCAGCTGACTGTGGAGAGCGACG
AAAGTGGGGATGACCTTCTGGATATTTAGGTGGATGTCAATGTAGATGAATTTCTAGTGGTGGAAACCGTTTTCT
AATAATGTCCTTGATTGTCCAGTGAGCAATCTGTAATTGATCTATAACTGAATTCAGCTTGTCAAGATGTTT
ATAAATTGATTTTCATCCTGCCACAGAAAGGCATAAGCTGCATGTATGATGGGTACTATCAATCATTGCTCAAA
AAAATTTTGTATAATGACAGTACTGATAATATTAGAAATGATACCGCAAGCAAATGTATATCACTTAAAAATGT
CATATATTCTGTCTGCGTAACTAAGGTATATATTCATATGTGCTCTAATGCAGTATTATCACCGCCCCGCAAAA
GAGTGCTAAGCCCAAAGTGGCTGATATTTAGGGTACAGGGGTATAGCTTTAGTTACATCTTTCCCATTTCCAC
TAGAAATATTTCTCTTGAGAGAATTTATTATTTATGATTGATCTGAAAAGGTCAGCACTGAACCTATGCTAAAT
GATAGTAGTTTTACAACTACAGATTCTGAATTTTAAAAAGTATCTTCTTTTCTCGTGTTATATTTTTAAATAT
ACACAAGACATTTGGTGACCAGAACAAGTTGATTTCTGTCTCAGTTATGTTAATGAACTGTGCTCCTCTTA
AGAAAAATTGTGTGTGCAAGCACCAGGCAAAGAAATGGACTCAGGATGCTTAGCGGTTTAAACAAACCTGTAGAT
AAATCACTTGAGTGACATAGTTGCGCAAAGATGTTAAGTTTCTTAAGAAACCTTTTAATAACTGAGTTTAGCAA
AAGAATAAACTATATAGCTCAATTTATTTAAAAAAATCTTTGCATGTGTGATGTTATCATTTGGCTTCATTTCTT
ACCCAAGGTATGTCTGTTTTGCCATAAATCAGCAGAGTCATTTTATTCTGGGTGATCCTAACACACCATTGCTAC
GTTAGATTTGAAATGACATCTCTGTAAAAGAATCTTCTATGGAAATAATGGTGCCCTGCAAAATCTTCTTTGA
ACTCACAGGTTAGGGATCACACAACCTTACTTAATCGTTTTTTGTTTTTTTCTTTATATGTCAATGGCC
CATGTCTCCGGGAAAATTAGAAAAGCAAAATGATTACAAAGTGCTGTTAGATTTCTTGTGCTGGGCCAGCCAAG
TAGAAGTGGACTTGACTTGGACCTTTAACTATTTTATTACAGATTGGACATTTGCTGTTTCAGATGTTTTTAA
GAGGGATTATCTCAGAATCCTGTGACCTCCAGGTTGTTTTATAATCTATTTTCTCTATTTAACATTCCTCAGAT
AGATAGGCAAAATAGGACATTCCTTCTGTGTACAGAAGTATCGTGGTAGTGGCAGTCTACAGTTTATATGATTCA
TTGTAATATGAGATAAAGAACAACCAGTCATGTGGCCAAAAGGATTAGATTTGATTTGATGTTCACTTGGAGTT
TACTTTTTGTACATACAAGATAAAATAAATATTGGATTTGT

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FIGURE 3934

MKI IAMSPAGFWQSRNRDYLVTSLGVVWVVLH FALLNAYTYMMGACVIVFRFFSICGKHVTLKMLLLTVVSM
YKSFFIIVGMFLLLLCYAFAGVVLFGTVKYGENINRHANFSSAGKAITVLFRIVTGEDWNKIMHDCMVQPPFCTP
DEFTYWATDCGNYAGALMYFCSFYVIIAYIMLNLLVAIIVENFSLFYSTEEDQLLSYNDLRHFQIIWNMVDDKRE
GVIPTFRVKFLLRLLRGRLEVLDLKD KLLFKHMCYEMERLHNGGDVTFHDVLSMLSYSVDIRKSLQLEELLARE
QLEYTIEEEVAKQTIRMWLKKCLKRIRAKQQQSCSIIHSLRESQQQELSRFLNPPSIETTQPS EDTNANSQDNSM
QPETSSQQQLLSPTLSDRGGSRQDAADAGKPQRKFGQWRLPSAPKPI SHSVSSVNLRFGGRTTMKSVVCKMNPMT
DAASCSEVKKWWTRQLTIVESDESGDLDLDI

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FIGURE 3935

CTTGGCTGGAACCTGAGACGGATTTCGCTCCCAAATGATGCTCCAGTGGCTGGAGCAACTCAAGTTCATCATTGTC
CTGAGAGAGAGGAGCAGCGCGGTTCTCGGCCGGGACAGCAGAACGCCAGGGGACCCTCACCTGGGCGCGCCGGGG
CACGGGCTTTGATTGTCCTGGGGTCGCGGAGACCCGCGCGCCTGCCCTGCACGCCGGGCGGCAACCTTTGCAGTC
GCGTTGGCTGCTGCGATCGGCCGGCGGGTCCCTGCCGAAGGCTCGGCTGCTTCTGTCCACCTCTTACACTTCTTC
ATTTATCGGTGGATCATTTCGAGAGTCCGTCTTGTAATGTTTGGCACTTTGCTACTTTATTGCTTCTTTCTGGC
GACAGTTCCAGCACTCGCCGAGACCGGCGGAGAAAGGCAGCTGAGCCCGGAGAAGAGCGAAATATGGGGACCCGG
GCTAAAAGCAGACGTCGTCCTTCCCGCCCGCTATTTCTATATTAGGCAGTGGATACATCAGGGAATAAATTCAC
ATCTTCTCCAGGCGAAAAGGTCTTCCAGGTGAAAGTCTCAGCACCAGAGGAGCAATTCAGTAGAGTTGGAGTCCA
GGTTTTAGACCGAAAAGATGGGTCTTTCATAGTAAGATACAGAATGTATGCAAGCTACAAAAATCTGAAGGTGGA
AGTTAAATTCGAAGGGCAACATGTGGCCAAATCCCATATATTTTAAAGGGCCGGTTTACCATGAGAACTGTGA
CTGTCTCTGCAAGATAGTGCAGCCTGGCTACGGGAGATGAAGTGCCTGAAACATTGCTCAGATTCAGAGAGA
TCTGGCACATTTCCCTGCTGTGGATCCAGAAAAGATTGCAGTAGAAATCCAAAAAGATTGGACAGAGGCAGAG
CCTATGTCACTACACCTTAAAGGATAACAAGGTTTATATCAAGACTCATGGTGAACATGTAGGTTTTAGAATTTT
CATGGATGCCATACTACTTTCTTTGACTAGAAAGGTGAAGATGCCAGATGTGGAGCTCTTTGTTAATTTGGGAGA
CTGGCCTTTGGAAAAAAGAAATCCAATTCAAACATCCATCCGATCTTTTCTGGTGTGGCTCCACAGATTCCAA
GGATATCGTGATGCCTACGTACGATTGACTGATTCTGTTCTGGAAACCATGGGCCGGGTAAGTCTGGATATGAT
GTCCGTGCAAGCTAACACGGGTCTCCCTGGGAAAGCAAAAATTCAGTCCGTCTGGAGAGGGCGAGACAGCCG
CAAAGAGAGACTCGAGCTGGTTAAACTCAGTAGAAAACACCCAGAAGTCTATAGACGCTGCTTTCACCAACTTTTT
CTTCTTTAAACACGATGAAAACCTGTATGGTCCCATTGTGAAACATATTTTCAATTTTTGATTTCTTCAAGCATAA
GTATCAAATAAATATCGATGGCACTGTAGCAGCTTATCGCCTGCCATATTTGCTAGTTGGTGACAGTGTGTGCT
GAAGCAGGATTCCATCTACTATGAACATTTTTACAATGAGCTGCAGCCCTGGAAACACTACATTCCAGTTAAGAG
CAACCTGAGCGATCTGCTAGAAAAACTTAAATGGGCGAAAGATCACGATGAAGAGGCCAAAAAGATAGCAAAAGC
AGGACAAGAATTTGCAAGAAATAATCTCATGGGCGATGACATATTCTGTTATTATTTCAAACCTTTTCAGGAATA
TGCCAATTTACAAGTGAGTGAGCCCCAAATCCGAGAGGGCATGAAAAGGGTAGAACCACAGACTGAGGACGACCT
CTTCCCTTGTAATTGCCATAGGAAAAAGACCAAGATGAAGTCTGATATGCAAAATAACTTCTATTAGAATAATG
GTGCTCTGAAGACTCTTCTTAATAAAAAGAAGAATTTTTTTAAGTATTAATTCCATGGACAATATAAAATCTGT
GTGATTGTTTGCAGTATGAAGACACATTTCTACTTATGCAGTATTCTCATGACTGTACTTTAAAGTACATTTTTTA
GAATTTTATAATAAAACCACCTTTATTTTAAAGGAAAAA

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FIGURE 3936

MFGTLLLYCFFLATVPALAE TGGERQLSPEKSEIWGPGLKADVVL PARYFYIQAVDTSGNKFTSSPGEKVFQVKV
SAPEEQFTRVGVQVLD RKDGSFIVRYRMYASYKNLKVEVKFQGQH VAKSPYILKGPVYHENCDCPLQDSA AWLRE
MNCPETIAQIQRD LAHFPAVDPEKIAVEIPKRFGQRQSLCHYTLKDNKVYIKTHGEHVGFRI FMDAILLSLTRKV
KMPDVELFVNLGDWPLEKKKSNSNIHP IFSWCGSTDSKDIVMPTYDLTDSVLETMGRVSLDMM SVQANTGPPWES
KNSTAVWRGRDSR KERLELVKLSRKHP ELIDAAFTNFFFFKH DENLYGPIVKHISFFDFFKH KYQINIDGTVAAY
RLPYLLVGDSVVLKQDSIYYEHFYNELQPWKHYIPVKS NLSDLLEK LKWAKDHDEEAKKIAKAGQEFARN NLMGD
DIFCYYFKLFQEYANLQVSEPQIREGMKRVEPQTEDDLFPCTCH RKKTKDEL

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FIGURE 3937A

GAGTGTGGCTGCAGTGCGCCGGGACACCAGGGCTCCGCGCTCCGCACTCAAGAGGCTCCCGCGTCCCAACCCCTC
GCGCCCGCGCTTCGCGGATCCAGGCCGAGGACCGAAAGGGGCCCGCCGAGCCCCGGGGCCGGCGCCAGAGAG
CCCAGCAAGGCCGGCCGCCCTGCCGGTGTGCCGCCGGCGGGTGCTTCTGGAAGGGCCAATGCGTTTCGGGCAGCAG
CCCCTGAAGCCGAGCCCCGAGGCTAAGTGGGACTGACCGGGGGCCAGAGTGGACGAACCGCCAGCATGGGGAGAGA
CCAGCGCGCGGTGGCCGGCCCTGCCCTACGGCGGTGGCTGCTGCTGGGGACAGTGACCGTGGGGTTCTCTGCCCA
GAGCGTCTTGGCGGGTGTGAAGAAGTTTGATGTGCCGTGTGGAGGAAGAGATTGCAGTGGGGGTGCCAGTGCTA
CCCTGAGAAAGGTGGACGTGGTCAGCCTGGGCCAGTGGGCCCCAGGGGTACAATGGGCCACCAGGATTACAAGG
ATTCCCGGGACTGCAGGGACGTAAAGGAGACAAGGGTGAAAGGGGAGCCCCGGAGTAACGGGACCCAAGGGCGA
CGTGGGAGCAAGAGGCGTTTCTGGATTCCCTGGTGCCGATGGAATTCTTGACACCCGGGGCAAGGTGGGCCAG
GGGAAGGCCGGGCTACGATGGCTGCAACGGAACCCAGGGAGACTCAGGTCCACAGGGGCCCGGGCTCTGAGGG
GTTACCGGGCCCTCCCGGGCCCCAAGGACAAAAGGGCAGAAAGGTGAGCCTTATGCACTGCCATAAGAGGAGCG
CGACAGATATCGGGGTGAACCTGGAGAGCCTGGATTGGTCGGTTTCCAGGGACCTCCCGGCCCGCTGGGCATGT
GGGACAGATGGGTCCAGTTGGAGCTCCAGGGAGACCAGGACCACCTGGACCCCTGGACCAAAAGGACAGCAAGG
CAACAGAGGACTTGGTTTCTACGGAGTTAAGGGTGAAAGGGTGACGTAGGGCAGCCGGGACCCAACGGGATTCC
ATCAGACACCCCTCCACCCCATCATCGCGCCACAGGAGTCACCTTCCACCCAGATCAGTACAAGGGTGAAAAGG
CAGTGAGGGGGAACCAAGGAATAAGAGGCATTTCTTGAAGGGAGAAGAAGGAATCATGGGCTTCTCTGGACTGAG
GGGTTACCTGGCTTGAGTGGTGAAAAGGATCACCAGGACAGAAGGGAAGCCGAGGCCCTGGATGGCTATCAAGG
GCCTGATGGACCCCGGGGACCCAAGGGAGAAGCCGGAGACCCAGGGCCCCCTGGACTACCTGCCCTACTCCCTCA
CCCTTCCCTAGCAAAAGGTGCCAGAGGTGACCCGGGATTCCAGGGGCCCAAGGGGAGCCAGGAAGCCAGGGTGA
GCCAGGAGACCCGGGCCTCCAGGTCCCCCTGGCCTCTCCATCGGAGATGGAGATCAGAGGAGAGGCCCTGCCGG
TGAGATGGGACCCAAGGGCTTCATCGGAGACCCGGCATCCCTGCGCTCTACGGGGGCCACCTGGACCTGATGG
AAAGCGAGGGCCTCCAGGACCCCGGGCTCCCTGGACCACCTGGACCTGATGGCTTCTGTGTTGGGCTGAAAGG
AGCAAAAGGAAGAGCAGGCTTCCCTGGGCTTCCCGCTCCCTGGAGCCCGCGGACCAAGGGGTGGAAAGGTGA
CGCTGGGGAATGCAGATGTACAGAAGGCGACGAAGCTATCAAAGGTCTTCCGGGACTGCCAGGACCCAAGGGCTT
CGCAGGCATCAACGGGGAGCCGGGGAGGAAAGGGGACAGAGGAGACCCCGGCAACACGGCCTCCCTGGGTTCCC
AGGGCTCAAGGGAGTGCCTGGCAACATTGGTGCTCCCGGACCAAGGAGCAAAAGGAGATTCCAGAACAATCAC
AACCAAAGGTGAGCGGGGACAGCCCGGCGTCCCAGGTGTGCCGGGATGAAAGGTGACGATGGCAGCCCAGGCCG
CGATGGGCTCGATGGATTCCCCGGCCTCCAGGCCCTCCCGGTGATGGCATCAAGGGCCCTCCAGGGGACCCAGG
CTATCCAGGAATACCTGGAACGAAGGGTACTCCAGGAGATAAGGGCCCCAGGACTGGGCCTTCCCGGCCTCAA
AGGCCAACGTGGTTTCCCTGGAGACCGCGCTTACCTGGACCACAGGCTTCTTGGGCCCTCCTGGCCCCGAGG
GACCCAGGACAAATAGATTGTGACACAGATGTGAAAAGGGCCGTTGGAGGTGACAGACAGGAGGCCATCCAGCC
AGGTTGCATAGGAGGGCCCAAGGGATTGCCAGGCTGCCAGGACCCCGAGGCCACAGGTGCCAAAGGCCTCCG
AGGAATCCCAGGCTTCGAGGAGCTGATGGAGGACAGGGCCAGGGGCTTGCCAGGAGACGCAGGTCTGTAAGG
GTTCCAGGACCCCGAGGTTCATAGGACCCGAGGATCCAAAGGTGAGTGGGCCTCCCTGGCCAGATGGATC
CCCAGGTCCCATCGGCCTGCCAGGECAGATGGGCCCTTGGGGAAGGGGCCTCCCTGGAGAAGTCTGGGAGC
TCAGCCCCGGGCCACGGGGAGATGCTGGTGTGCTGGACAGCCTGGGCTTAAAGGCCTTCCCGGAGACAGAGGCC
CCCTGGATTGAGAGGAAGCAAGGGATGCCTGGGATGCCAGGGCTGAAGGGCCAGCCAGGCCTCCAGGACCTTC
CGGCCAGCCAGGCCTGTATGGGCCTCCAGGACTGCATGGATTCCAGGAGCTCCTGGCCAAGAGGGGCCCTTGGG
GCTCCAGGAATCCAGGCCGTGAAGGTCTGCTGGTGATAGAGGGGACCTGGGGACACAGGCGCTCCTGGCCCC
TGTGGGCATGAAAGGTCTCTCTGGTGACAGAGGAGATGCTGGCTTCAAGGGGAGCAAGGCCATCCAGGAAGCCC
TGGATTTAAAGGAATTGATGGAATGCCTGGGACCCCGGGCTAAAAGGAGATAGAGGCTCACCTGGGATGGATGG
TTTCCAAGGCATGCCTGGACTCAAAGGGAGACCCGGGTTTCCAGGGAGCAAGGCGAGGCTGGATTTTTCGGAAT
ACCCGGTCTGAAGGGTCTGGCTGGTGAGCCAGGTTTTAAAGGCAGCCGAGGGGACCTGGGCCCCAGGACCACC
TCCTGTCTCTGCCAGGAATGAAAGACATTAAAGGAGAGAAAGGAGATGAAGGGCCTATGGGGCTGAAAGGATA
CCTGGGCGCAAAAGGTATCCAAGGAATGCCAGGCATCCAGGGCTGTGAGGAATCCCTGGGCTGCCTGGGAGGCC
CGGCCACATCAAAGGAGTCAAAGGAGACATCGGAGTCCCGGCATCCCGGTTTGCCAGGATTCCCTGGGGTGGC
TGGCCCCCTGGAATTACGGGATTCCAGGATTCTAGGAAGCCGGGGTGACAAAGGTGCCCCAGGGAGAGCAGG
CCTGTATGGCGAGATTGGCGCGACTGGTGATTTCCGGTGACATCGGGGACACTATAAATTTACCAGGAAGACCAGG

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FIGURE 3937B

CCTGAAGGGGGAGCGGGGCACCACTGGAATACCAGGTCTGAAGGGATTCTTTGGAGAGAAGGGAACAGAAGGTGA
CATCGGCTTCCCTGGGATAACAGGCGTGACTGGAGTCCAAGGCCCTCCTGGACTTAAAGGACAAACAGGCTTTCC
AGGGCTGACTGGGCCTCCAGGGTCGCAGGGAGAGCTGGGGCGGATTGGACTGCCTGGTGGCAAAGGAGATGATGG
CTGGCCGGGAGCTCCGGGCTTACCAGGTTTTCCGGGACTCCGTGGGATCCGCGGCTTACACGGCTTGCCAGGCAC
CAAGGGCTTTCCAGGATCCCCAGGTTCTGACATCCACGGAGACCCAGGCTTCCCAGGCCCTCCTGGGGAAAGAGG
TGACCCAGGAGAGGCCAACACCCCTTCCAGGCCCTGTGGGAGTCCCAGGACAGAAAGGAGACCAAGGAGCTCCAGG
GGAACGAGGCCCCACCTGGGAGCCAGGACTTCAGGGGTTCCCTGGTATCACACCCCTTCCAACATCTCTGGGGC
ACCTGGTGACAAAGGGGCGCCAGGGATATTTGGCCTGAAAGGTTATCGGGGGCCACCAGGGCCACCAGGTTCTGC
TGCTCTTCTGGAAGCAAAGGTGACACAGGGAACCCAGGAGCTCCAGGAACCCAGGGACCAAAGGATGGGCGG
GGACTCCGGGCCCCAGGGCAGGCCTGGTGTGTTTGGTCTCCCAGGAGAAAAAGGGCCAGGGGTGAACAAGGCTT
CATGGGGAACACTGGACCCACTGGGGCGGTGGGCGACAGAGGCCCAAGGGACCAAGGGAGACCCAGGATTCCC
TGGTGCCCCCGGGACTGTGGGAGCCCCGGGATTGCAGGAATCCCCAGAAGATTGCCGTCCAACCAGGGACAGT
GGGTCCCCAGGGGAGGCGAGGCCCCCTGGGGCACCGGGGAGATGGGGCCCCAGGGCCCCCGGAGAACCAGG
TTTCCGTGGGGCTCCAGGGAAAGCTGGGCCCCAAGGAAGAGGTGGTGTGTCTGCTGTTCCCGGCTTCCGGGGAGA
TGAAGGACCCATAGGCCACCAGGGGCGGATTGGCCAAGAAGGTGCACCAGGCCGTCCAGGGAGCCCGGGCCTGCC
GGGTATGCCAGGCCGCAGCGTCAGCATCGGCTACCTCCTGGTGAAGCACAGCCAGACGGACCAGGAGCCCATGTG
CCCAGTGGGCATGAACAAACTCTGGAGTGGATACAGCCTGCTGTACTTCGAGGGCCAGGAGAAGGCGCACAACCA
GGACCTGGGGCTGGCGGGCTCCTGCCTGGCGCGGTTACAGACCATGCCCTTCTGTACTGCAACCTGGTGTATGT
CTGCTACTATGCCAGCCGGAACGACAAGTCTACTGGCTCTCTACCACTGCGCCGTGCCATGATGCCCGTGGC
CGAGGACGAGATCAAGCCCTACATCAGCCGTGTTCTGTGTGTGAGGCCCCGGCCATCGCCATCGCGGTCCACAG
TCAGGATGTCTCCATCCACACTGCCCAGCTGGGTGGCGGAGTTTGTGGATCGGATATTCCTTCTCATGCACAC
GGCGGCGGGAGACGAAGGCGGTGGCCAATCACTGGTGTACCGGGCAGCTGTCTAGAGGACTTCGCGGCCACACC
ATTCATCGAATGCAATGGAGGCCGCGGCACCTGCCACTACTACGCCAACAAGTACAGCTTCTGGCTGACCACCAT
TCCCGAGCAGAGCTTCCAGGGCTCGCCCTCCGCGACACGCTCAAGGCCGGCCTCATCCGCACACACATCAGCCG
CTGCCAGGTGTGCATGAAGAACCTGTGAGCCGGCGCGTGCCAGGAAGGGCCATTTTGGTGCTTATTCTTAACCTTA
TTACCTCAGGTGCCAACCACAAAATTGGTTTTATTTTTTCTTAAAAAAGTCTACCAAGGAATTTGCA
TCCAGCAGCAGCACTTAGACCTGCCAGCCACTGTCACCGAGCGGGTGCAAGCACTCGGGGTCCCTGGAGGGCAAG
CCCTGCCCCACAGAAAGCCAGGAGCAGCCCTGGCCCCCATCAGCCCTGCTAGACGCACCGCCTGAAGGCACAGCTA
ACCACTTCGCACACACCCATGTAACCACTGCACTTTCCAATGCCACAGACAACCTCACATTGTTCAACTCCCTTCT
CGGGGTGGGACAGACGAGACAACAGCACACAGGCAGCCGAGCCGTGGCCAGAGGCTCGAGGGGCTCAGGGCCTCAG
GCACCCGTCCCCACACGAGGGCCCCCGTGGGTGGGCCTGGCCCTGCTTTCTACGCCAATGTTATGCCAGCTCCATG
TTCTCCCAAATACCGTTGATGTGAATTATTTTAAAGGCAAACCGTGCTCTTTATTTTAAAAAAGCTGATAATC
ACACTGCGGTAGGTCACTTCTTTTGGCACATCCCTATAGACCACTGGGTTTGGCAAAACTCAGGCAGAAGTGGAGA
CCTTTCTAGACATCATTGTGAGCCTTGCTACTTGAAGGTACACCCCATAGGGTCGGAGGTGCTGTCCCCACTGCC
CCACGTTGTCCCTGAGATTTAACCCTCCACTGCTGGGGGTGAGCTGTACTCTTCTGACTGCCCCCTCCTGTGTA
ACGACTACAAAATAAACTTGGTTCTGAATATTTTT

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FIGURE 3938

AGTCGTAGGCGCTGGCCGCTGACATGTTGAGGACTACGCGCGGGCCAGGCCTGGGCCCCCGCTGCTCCAGGCCG
CGCTGGGCCCTTGGGCGGGCTGGGTGGCACTGGCCTGCGGGCCGGGCGGCGAGCGGGGGGCGCGGGCGGGCCTGGC
TGCAGCCACGGGCGGGGAGACGGGTGTGAGGTGTACAACAGCCTCACCAGGAGGAAGGAACCCCTAATCGTGG
CGCACGCCGAAGCCGCTCCTGGTATAGCTGTGGACCAACTGTATATGATCATGCGCACCTTGGCCATGCTTGCT
CATATGTTAGATTTGATATCATTGCAAGGATCCTAACCAAGGTTTTTGGATGCAGCATAGTCATGGTGATGGGTA
TTACAGATGTAGATGATAAAATCATCAAAAGAGCCAATGAGATGAATATTTCCCCCGCTTCCCTCGCCAGTCTTT
ATGAGGAAGACTTCAAGCAGGACATGGCAGCCCTGAAGGTTCTCCACCCACGGTGTACCTGAGGGTAACCGAAA
ATATTCTCAGATAATTTCTTTTATTGAAGGAATCATTGCTCGTGGGAACGCTTATTCAACGGCAAAAGGCAATG
TCTACTTCGATCTGAAGTCTAGAGGAGACAAGTATGGCAAATTGGTCGGCGTGGTCCCTGGTCCAGTCGGAGAGC
CAGCGGACTCTGACAAGCGTCATGCCAGTGACTTCGCCCTGTGGAAGGCGGCCAAACCCAGGAGGTGTTCTGGG
CCTCTCCCTGGGGACCCGGGAGGCCGGGCTGGCACATCGAGTGCTCTGCCATCGCTAGTATGGTATTTGGAAGTC
AACTGGATATCCATTGAGGTGGGATAGATTTAGCTTTTCCACATCATGAGAACGAAATTGCACAGTGCGAAGTCT
TTCATCAGTGCGAGCAGTGGGGAAATTATTTTCTGCATTCTGGGCATTTGCACGCCAAAGGCAAGAAAAA
TGTCCAAATCATTAAAGAACTACATTACTATTAAGGACTTTCTGAAGACCTTTTCCCCGATGTCTTCCGGTTCT
TCTGCCTGCGGAGCAGCTACCGCTCAGCCATCGACTACAGTGACAGCGCCATGCTCCAAGCTCAGCAGCTGCTCC
TGGGGCTGGGCTCTTTTCTGGAGGACGCACGTGCCTACATGAAGGGGCAGCTGGCCTGCGGCTCCGTCAGGGAAG
CGATGCTGTGGGAGAGGCTCTCCAGCACCAAGAGGGCCGTGAAGGCGGCCTTGGCAGATGATTTGACACACCCA
GGGTGGTTGATGCCATCCTGGGCCTTGACACACGGGAATGGACAGCTCAGGGCGTCCCTGAAGGAACCTGAAG
GGCCGAGAAGTCCTGCTGTGTTTGGTGCCATCATCTCTTACTTTGAACAGTTTTTGAACAGTTGGAATTTCTC
TGGCAAATCAACAGTACGTTTTCAGGAGACGGCAGCGAGGCTACCTTGATGGTGTTGGTGGACGAGCTGGTGCGGT
TCCGGCAGAAGGTCCGGCAGTTTTCGCTGGCCATGCCCAGGGCCACGGGGACGCCCCGGCGGCAGCAGCTCCTAG
AAAGGCAGCCCCTGCTGGAAGCATGCGACACCCTGCGCCGGGGCCTGACTGCCACGGCATCAACATCAAGGACA
GAAGCAGTACAACATCCACGTGGGAAGTGTGGATCAAAGGACAAAAGACCAAAATCAGCGGGCTGAGGATGGA
GCACAGCCATGAACCTGCTCAGGACAAGACGCACCCATGCTTCTCAGGGTCAAGGCTTTATGTTAAAGCTTCCTG
TCGGGGCTGCTAGGTGAGCATTAAAGTAAGGCAACCAACAGTG

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FIGURE 3939

MLRTRGPGGLGPPLLQAALGLGRAGWHWPAGRAASGGRGRAWLQPTGRETGVQVYNSLTGRKEPLIVAHAEAASW
YSCGPTVYDHAHLGHACSYVRFDIIRRILTKVFGCSIVVMGITDVDDKI IKRANEMNISPASLASLYEEDFKQD
MAALKVLPPTVYLRVTENIPQIISFIEGIIARGNAYSTAKGNVYFDLKS RGD KYGKLVGVVPGPVGEPADSDKRH
ASDFALWKA AKPQEVFWASPWGPGRPGWHIECSA IAS MVFGS QLDIHS GGIDLAFPHHENEIAQCEVFHQCEQWG
NYFLHSGHLHAKGKEEKMSKSLKNYITIKDFLKTFS PDVFRFFCLRSSYRSAIDYSDSAMLQAQQLLLGLGSFLE
DARAYMKGQLACGSVREAMLWERLSSTKRAVKAALADDFDTPRVVDAILGLAHHGNGQLRASLKEPEGPRSPAVF
GAIISYFEQFFETVGISLANQQYVSGDGSEATLHGVDDELVRFRQKVRQFALAMPEATGDARROQLLERQPLLEA
CDTLRRGLTAHGINIKDRSSTTSTWELLDQRTKDQKSAG

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FIGURE 3940

CGGGGGCTGGCGGCTGCGGCTCGGGCGGAGAGTGCGGCATGCGCTCGGAAAAGGAGGGGGCCGGAGGCCCTTCGGGC
GGCCGTTGCCGCGCGGGGCCCGAGCGGGAGGGAGAAGCTGTCCGGCCCTAGAAGTGCAGTTCCACCGCGACTCGCA
GCAGCAGGAGGCTGAGACGCCGCCAACTTCGTCTCTCCGGTTGCGGGGGCGGTGCGGGGCAAACCTCGCGAGGAGAA
GAGGACGGCCCTGAGCAAGGTGGTCATCCGCCGCTGCCTCCGGGCTCACCAGGAGCAGCTGGAGGAGCAGCT
GCGCCCGCTGCCAGCACACGACTACTTCGAGTTCTTCGCCGCCGACCTGAGTCTTTATCCTCATCTCTACTCAAG
AGCATACATTAATTTTAGGAATCCTGATGACATCCTTCTTTTAGAGATCGTTTTGATGGATATATCTTCCTTGA
CAGCAAAGGCCCTAGAATATCCTGCAGTGGTAGAGTTTGCTCCATTCCAGAAGATAGCCAAAAAGAGCTGAGAAA
AAAAGATGCCAAGACTGGAAGCATCGAAGATGATCCAGAATATAAGAAGTTTTTAGAAACCTACTGTGTGGAGGA
AGAGAAGACCAGTGCCAACCTGAGACTCTGCTGGGGGAGATGGAGGCGAAGACAAGAGAGCTCATTGCTAGAAG
AACCACACCTCTTTTGGAAATATATTAATAATAGAAAATTAGAAAAGCAGAGAATTCGAGAAGAGAAGCGAGAAGA
ACGGAGGAGGAGAGAGTTAGAAAAGAAACGTTTGCGGGAAGAGGAAAAAGAAAGAGAAGAAGAAAGATG
CAAAAAAAGAGACAGATAAACAGAAAGAAATTGCAGAGAAAGAAAGTAAGGATTAAGCTTCTTAAGAAACCAGA
AAAGGGAGAGGAACCAACCACAGAGAAACCAAGAAAGAGGAGAGGAGATTGATACTGGAGGTGGCAAGCAGGA
ATCCTGTGCCCCCGGTGCAGTCGTAAAAGCCAGGCCCATGGAAGGCTCGCTGGAGGAGCCCCAGGAGACGTCACA
CAGCGGCAGTGATAAAGAGCACAGGGATGTGGAGAGATCTCAAGAACAAGAACTGAAGCACAAAGATACCATGT
GGATGACGGCAGGAGGCACAGAGCTCACCACGAGCCTGAACGGCTTCCAGAAGGAGTGAGGATGAGCAGAGATG
GGGGAAGGACCTGGCCAAGACAGAGGGAAGAAGGGGAGCCAGGACAGCGGGGCTCCGGGGGAGGCCATGGAGAG
ACTGGGAAGAGCGCAGAGGTGTGACGACAGTCCAGCACCCAGAAAAGAGCGACTGGCAACAAGGACCGGCCAGC
CTTGCAGCTGTATGATCCAGGAGCTCGCTTCCGAGCGCAGAGTGTGGCGGAAACAGGAGGATCTGCAAGGCAGA
AGGTTCCGGGACTGGTCCTGAGAAGAGGGAAGAGGCAGAGTGAGTCACTGCACGCACCTGGCCTCCATGGACGAG
CAAGGGCATCCCAGAAACGTGTAAATGACCCGAGTGTGACTGGGAAGGAGAACTTATTCCTTACCAGGAACTG
GAAGCTAAAAATACAGAGGGTGACGTAGAAACACGCAGAAACCATTTCTAAAGAAAGTAGTGATCTTGTATTAAAT
TGAGCAGAATTCTCACAGATTTTACCATTCTGTATATAAAGTAGTATTTGTTGTTTAGCCAAAACAGAAATGAT
TTCCACTGGACAGTAGAAAAATATGTGTAAATAGGGAAGAAAGTTAGTATTGGATCAGTGTGAGTCCTGAAGCA
CTTTCAGTGCTGTGAGAACGACATCCACTTTGGGTTTCATTGTTTGTAAAGCAGAGGAGCTGTGAGTCACTCGTG
CTTCTCGGTGGCCTCTGAGCCATGGTGTGAGTGAAGAGTAGTTCTTGTGTTTACAACCTTTGTGAGTCAGCCA
TGCCCGCAAAGCGTGCTGTGTTTTAGTCCTGGTAGGAATTTATCAGAGTTCACACTATATAAAACCCAAACAGC
TTCAACTATTGCCCTTTCAACAGTTTTGCCACTGACCGGATAGAAACGGTTTCAGTCTCTGGATGGATGTGTTTG
TGGTTTGTAAACCATTACGGTTTAAACCATGGTTTAAAGAAATTTGCCAAATAACAGAAATTTTGTTCGGGAAGGGA
TAAACTAGATATAGCATACAGAGCCTGTTTTGAGTTTTAGATACTTTATTTGTAAATAACTTAAATAGCTTTC
TGAAACCGTGCAATTCTGTAGTTTCTTCCTTTCAGTGAAATTTGCTAAATGTCAATGTATTTTTGGCACTGCGATTT
TAACCATTTATTAAATAAAAAATTTGTAAAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3941

MRSEKEGAGGLRAAVAARGPSGREKLSALEVQFHRDSQQQEAETPPTSSSGCGGGAGKPREEKRTALSKVVIRRL
PPGLTKEQLEEQLRPLPAHDYFEFFAADLSLYPHLYSRAYINFRNPDDILLFRDRFDGYIFLDSKGLEYPAVVEF
APFQKIAKKKLRKKDAKTGSIEDDPEYKKFLETYCVVEEKT SANPETLLGEMEAKTRELIARRTTPLLEYIKNRK
LEKQRIREEKREERRRRELEKKRLREEEKRRRREERCKKKKETDKQKKIAEKEVRIKLLKKPEKGEEPTTEKPKE
RGEEIDTGGGKQESCAPGAVVKARPMEGSLEEPQETSHSGSDKEHRDVERSQQESEAQRYHVDDGRRHRAHHEP
ERLSRRSEDEQRWGKGPQDRGKKGSQDSGAPGEAMERLGRAQRCDSPAPRKERLANKDRPALQLYDPGARFRA
RECGGNRRICKAEGSGTGPEKREEAE

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FIGURE 3942

CGGGGGCTGGCGGCTGCGGCTCGGCGGAGAGTGCGGC**ATCG**CTCGGAAAAGAGGGGGCCGGAGGCCTTCGGGC
GGCCGTTGCCGCGCGGGGCCCCGAGCGGGAGGGAGAAGCTGTTCGGCCCTAGAAGTGCAGTTCCACCGCGACTCGCA
GCAGCAGGAGGCTGAGACGCCGCCAACTTCGTCTCTCCGGTTGCGGGGGCGGTGCGGGCAAACCTCGCGAGGAGAA
GAGGACGGCCCTGAGCAAGGTGGTCATCCGCCGCTGCTCCGGGCCTCACCAAGGAGCAGCTGGAGGAGCAGCT
GCGCCCGCTGCCAGCACACGACTACTTCGAGTTCTTCGCCGCCGACCTGAGTCTTTATCCTCATCTCTACTCAAG
AGCATACATTAATTTTAGGAATCCTGATGACATCTTCTTTTAGAGATCGTTTTGATGGATATATCTTCTTGA
CAGCAAAGATCCAGAATATAAGAAGTTTTTAGAAACCTACTGTGTGGAGGAAGAGAAGACCAGTGCCAACCTTGA
GACTCTGCTGGGGGAGATGGAGGCGAAGACAAGAGAGCTCATTGCTAGAAGAACCACACCTCTTTTGAATATAT
TAAAAATAGAAAATTAGAAAAGCAGAGAATTCGAGAAGAGAAGCGAGAAGAACGGAGGAGGAGAGAGTTAGAAAA
GAAACGTTTGCGGGAAGAGGAAAAAAGAAGAAGAAGAGAAGAAGAAAGATGCAAAAAAAGAGACAGATAAACA
GAAGAAAATTGCAGAGAAAAGTAAGGATTAAGCTTCTTAAGAAACCAGAAAAGGGAGAGGAACCAACCACAGA
GAAACCAAAAGAAAGAGGAGAGGAGATTGATACTGGAGGTGGCAAGCAGGAATCCTGTGCCCCCGGTGCAGTCGT
AAAAGCCAGGCCCATGGAAGGCTCGCTGGAGGAGCCCCAGGAGACGTACACAGCGGCAGTGATAAAGAGCACAG
GGATGTGGAGAGATCTCAAGAACAAGAATCTGAAGCACAAAGATACCATGTGGATGACGGCAGGAGGCACAGAGC
TCACCACGAGCCTGAACGGCTTTCCAGAAGGAGTGAGGATGAGCAGAGATGGGGGAAAGGACCTGGCCAAGACAG
AGGGAAGAAGGGGAGCCAGGACAGCGGGGCTCCGGGGGAGGCCATGGAGAGACTGGGAAGAGCGCAGAGGTGTGA
CGACAGTCCAGCACCCAGAAAAGAGCGACTGGCAAACAAGGACCGGCCAGCCTTGCAGCTGTATGATCCAGGAGC
TCGCTTCCGAGCGCGAGAGTGTGGCGGAAACAGGAGGATCTGCAAGGCAGAAGGTTTCGGGGACTGGTCCTGAGAA
GAGGGAAGAGGCAGAG**TGAG**TCACTGCACGCACCTGGCCTCCATGGACGAGCAAGGGCATCCCAGAAACGTGTAA
ATGACCCCGAGTGTGACTGGGAAGGAGAACTTATTCCTTACCAGGAACTGGAAGCTAAAAATACAGAGGGTGAC
GTAGAAACACGCAGAAACCATTCTAAAGAAAGTAGTGATCTTGTATTAAATTGAGCAGAATTCTCACAGATTTTA
CCATTCTGTTATAAACTAGTATTTGTTGTTTAGCCAAAACAGAAATGATTTCCACTGGACAGTAGAAAAATAT
GTGTAAATAGGGGAAGAAAGTTAGTATTGGATCAGTGTGAGTCCTGAAGCACTTTCAGTGCTGTGAGAACGACAT
CCACTTTGGGTTTCATTTCGTTTGTAAGCAGAGGAGCTGTCAGTCACTCGTGCTTCTCGGTGGCCTCTGAGCCATG
GTGTGAGTGAAGAGTAGTTCTTGTTTGTTTACAACCTTTGTGAGTCAGCCATGCCCGCAAAGCGTGCTGTGTTTT
AGTCCTGGTAGGAATATTTATCAGAGTTCACACTATATAAAACCAACAGCTTCAACTATTGCCCTTTCAACAGT
TTTGCCACTGACCGGATAGAAACGGTTTCAGTCTCTGGATGGATGTGTTTGTGGTTTGTAAACCATTACGGTTTAA
ACCATGGTTTAAAGATTTGCCCAAATAACAGAAATTTTGTTCGGGAAGGGATAAACTAGATATAGCATACAGAGC
CTGTTTTTGGAGTTTGTAGATACTTTATTTGTAAATAACTTAAATAGCTTTCTGAAACCGTGCACTTCTGTAGTTTC
TTCCTTTTCAGTGAAATTGCTAAATGTCAATGTATTTTTGGCACTGCGATTTTAACCATTATTAAATAAAAAATTT
TGTTAAAGAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3943

MRSEKEGAGGLRAAVAARGPSGREKLSALEVQFHRDSQQQEAETPPTSSSGCGGGAGKPREEKRTALSKVVIRRL
PPGLTKEQLEEQLRPLPAHDYFEFFAADLSLYPHLYSRAYINFRNPDDILLFRDRFDGYIFLDSKDPEYKKFLET
YCVVEEKTSA NPETLLGEMEAKTRELIARRTTPLLEYIKNRKLEKQRIREEKREERRRRELEKKRLREEEKR
EEERCKKKETDKQKKIAEKEVRIKLLKKPEKGEEPTTEKPKERGEEDTGGGKQESCAPGAVVKARPMEGSLEEP
QETSHSGSDKEHRDVERSQQESEAQRYHVDDGRRHRAHHEPERLSRRSEDEQRWGKGPQDRGKKGSQDSGAPG
EAMERLGRAQRCDSPAPRKERLANKDRPALQLYDPGARFRARECGGNRRICKAEGSGTGPEKREEAE

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FIGURE 3944

CGGAAGTGCGGATCCCAGCGGCGGTGCTGTAGCTGAGCAGGCCTGGGGCTTGGTTCTATGTCCCTGTGGCTATGT
TTCCAGTGTCCTCTGGGTGTTTCCAAGAGCAACAAGAAACGAATAAATCTCTGCCCCGCAGCGCCTCCACCCAG
AGACCCGGACCAAGTTTACACAGGACAATCTGTGCCACGCCCAGCGCGAGCGCCTGGACTCGGCCAACCTGTGGG
TGCTGGTGGACTGCATCCTTCGCGACACCTCCGAGGACCTGGGACTCCAGTGTGACGCCGTGAACCTGGCCTTCG
GGCGCCGCTGTGAGGAAGTGGAGGACGCGCGGCACAAGCTGCAGCACCACCTGCACAAGATGCTGCGGGAATCA
CAGATCAGGAACACAACCTTGGTGGCACTGAAGGAGGCCATCAAGGACAAGGAGGAACCTCTGCACATAGCCCAGA
CCCGGCTGTAGCTGCTCTCACACCGGCCAACATGCAGCTGTGCCGCGATGCAGCCCAGTTCAGGTACTGCCTGG
GCCTCTGAGGCAGTCCCAGGTGCCCCCATCCACCTCCTCGCTGCGACCCTCTCCAATAAACTCCAATCTCCAC
ACACACATCCCCACAGGTGCTGAGAGGGGAGGGAGACTCTGCGGCCACACACAACATGCAAGCACGCCTTAAAC
ACACAGATATAGACATGACACTGGGCAGGTGATGGGTGCGGGGCTCCCCGTGCCAGGGACCTGTGCCACGTGG
TCTCACCCCCACCTGTGCTACCTCATCTTCCCGGGAGGAAGCTCCTTCAGACAAGGTGAGCTCCTGGAGGCCACG
GGGCCAGAGAGGCCAGAGAGGGCCATTCCCTGCTGCCCTGAGGGTGCTGTCCCCACCTCTGGTGGAAGTATGAC
CTACGCCTGGGCTACAGGCATAGATGGGCCGTCCTTTTGTTCCTTGTTAACGGATGCCTGGTGGCCCTTCTG
AGCCTAAGTACCTTTCTTCCCTGCCCCCTCAGTTCCTTCAAGGAAGTGGGTGCCTCCTTCCGTCAAATATCA
GGAATGGAAGAAGTGAAGCCTGGTGGGCTGAGGCCAGTCTGTCTGTGAGGTCGAGATTGCACGCGGGTCACT
CATTCCCACTCAGGCCCCGCGCTCCCTGGGAGGACCTCGTAATTTATGCTCTGCCCTAGAGCCGCTTTCCTGGTA
GGAATCCTTTTATGGCGTCTTCCCAGGACCTCCTGCCAGCTCCCATTTGGGAGTTTGGGTCCCCTCCACCCAGTA
GGTGCACTTCTGCCCTCCCCAGCCCCAGCTCACACCCCCAACACCCCAAGCTGGTGAGTGAGGTGGAGGAG
CTGTACAAGTCCATCACAGCGCTGCGGGAGAAGCTTCTACAAGCGGAGCAGTCCCTGCGCAACCTCAAGGACATC
CACATGAGCCTGGAGAAGGACGTCAGTCCATGACCAACAGTCTCTTCATCGACCGCCAGAAGTGCATGGCCCAT
CGTACTTGCTACCCCAACATTCTGCAGCTGGCTGGCTACCAAGTGAAGCAGCGGCACGGTGCTTCCCCCAATCCCC
CAAATAAACAGTGCGTTAGCTTTC

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FIGURE 3945

MFPVSSGCFQEQQETNKSLPRSASTPETRIKFTQDNLCHAQRERLDSANLWVLVDCILRDTSEDLGLQCDVNLA
FGRRC EELEDARHKLQHHLHKMLREITDQEHNLVALKEAIKDKEEPLHIAQTRL

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FIGURE 3946A

CTGACCACACACTCCTCACTCCCCTGGCCCTGATGGGCGGCAGACACCATGGTGCAGACGGATGTGCTCCTAC
CAGAGCCAGCACCCGACAGTGTACCCCTGCGAGCTGCCCTGCAAAGAGTATGACGTGGCCCGCAACATGGGCG
TCTACAGTCTCTCCAGCCTGGCCACCGCCAGCTGGAGGTGTGGTTCCAGAAGTGTATGCTCGCTACCAACAGGC
CTTCGCCGACTGCAACAGTGGAGCGGGAGCTGCAGGGGCGCGAGAGCCAGCAGCTGGCCGAGAGACCCAGGC
GCTGGCACAGCCGACACAGCAAGACTCCACGTGCAGGGTGGGCGAGCGACTGCAAGACACGCACAGCTGGAAGTC
AGAGCTGCAGCACGAGGTGGAGGTGCTGGCTGCAGAGACCGACCTGCTGCTGGCCAGAACGCGCTGGAGCG
TGCCCTGGATGCCATGGAGGTGCCCTTCTCCATCGCCACTGACAACATGCAGTGCAGCCAGCGCCACCAGCACGC
CAACCTTGTGCGTGACTATGTGGAGACGGAGCTGCTGAAGGTGCCAGCAGCCTTGGGTGGCCAGGACTTGTGGGC
ACAGAGAGGAGGAGCCCCCGGCAGTTTATGTGGACAAGCCACGTGGCTGCTGCAAGCACAGGGAGACCAGCCCT
CTGTGCGTGAGACACCTGAGTCTGAAATCTGGCCCTTAGTGACAGGAGGCAGTTTTGCCCCAGAAGGCCCTTG
ACTTCCAAGCAGCTGTTTTCTCCTCTCCTCCAATACCTTTGAGTCTGGCACAGTCATCCTGACCCTGGGCTCCCC
AGAGACCCTCCCTGATTGGGACAGTTGCTCCCGAGGTGGAAACCCAGGTCTGGGCCAGCACTGCGGGTGTGGACA
GGTAGGGTGGGATAGGCTGGGAGCCACTGCTCCCATTCATCCTATACAGAGCCGGGGACAGGAAGATCTGCACCC
ACAGGTCCCCTTCTCCTTGTACCTGTAACCTTCCCAATCCAGCCAGCTTGTCTATGGGGCAACCCATAGGGTG
AGAGAGTAACCTCAGTCTGGCACTGATGCTGGCTCTGGAGAATTCCCTGAGCTCTCAGAGCCTGGGGCCTCCATG
AGAACCCTACAGGCCTGTAGACATTTGTGAAAGATGTGGGGTGGAGGCAGCTGGTCTCCTGCCATACCCCCAAA
TTCAGGCAAGAACCCTTGAATCCCTCCCCCCTTCATGCCTTCCCTCCTCCTCCTTCCCTTCTGCAGGCCATA
TCCCCCTGCACCCTCTCAGTGCCTCAAGAACTGCTGCAGCTCCCGCAAACCTCTGCCTGCAACAAGGGTGCCTG
TGAAGTGATGGAGACACTGACAGTGCAGGAAGAAGCAAACCCAGGGACAGAGGGGTGCAGGACTCGGGCCCTGGC
ACACAAGGAGGTGTTGACAAAGGCCTTCAGCAGCTGGGCCTCCTGGGATCCTACCAAGGACCGGATCTGGTGCT
CAGGGCGTCTCCTCCCTCAGGAAGCTGAGCCCATCCGGAACATTAGGAGCTGCTGAAGAGAGCCATCGTGCAAG
CAGTGAGCCAGATCCAGTGGGTGAGGGCTGCCAAGGGATGACTCCTGACCCACCCAGCTGGTCTTGGGGC
AAGGCATTGAACGACAGAACCCTGAAGCTCAGAGCCAGCAGGGGTGCTCCAGGTACAGTGGGAGCACAGGGCT
GGGTGGGGGAGGTTCTGGCCCAGCCTGAGTTTGAAGTGGCCAAAGCCAGGGCCACAAGTATCTGCAGCCTCCCA
GCATGGGCGGCAGCTCTTCGTCACTGCTGAGCACAAAGGACCGCGCCAGAACTCCCTCCTGAAGCGGGCATGA
AGGCCTAGCCTGCAGCATGGAGGGTCCCCAGTGGGGCCTCCCTGGCCACACACCAAGGCCCTGCCCCACCTCGC
CCCAGACTGAACCGAGAGCACACGGAGATCTGCGAGATGGACTGGTTGGACAAGGTGGAGGCCTACAACCTCGAC
GAGACTTGCGGGCGCCACCACAGCCAGAGCAGGAGGTGCAGGCTCATCCGGCACTCCACCACCTTCCAAGAGAG
GGGGGCCCCAGCTCTGCCCCGCTGCTTGGCCTGGCTGTGGTCTCGCCTCCCTCTGCCTGGGGGCCCCAGCGGCGC
TGCTTCCCCAGCCTTGCCCCAGAGGCCCTCGCCCCGAGGGCACTTGGGCAACTGTCTGCCCCCTGGCATGAGAAA
GCGTGCAAGACCTCCTCAAGTGGCCAGCGCTGCACAGCCTGGTTGCCCGTAGACAGGACAGGGTGGGATGCGGT
CAGCCCCAGGCGCGGCAGGATTGCATTTCCACGAAGGCCAGCAGAGGGAGCACGACCACCGCCACTTGAGCA
TGGCAAACCTCCTGGCCCCGAGCGCCTCCACCCAGAGACCCGGACCAAGTTCACACAGGACAATCTGTGCCACG
CCCAGCGCAGCGCCTGGACTCGGCCAACCTGTGGGTGCTGGTGGACTGCATCCTTCGCGACACCTCCGAGGACC
TGGGACTCCAGTGTGACGCCGTGAACCTGGCCTTGGGGCGCGCTGTGAGGAAGTGGAGGACGCGCGGCACAAGC
TGCAGCACCACTGCACAAGGTGGGGCACCCTGAACCCGGAAGACAGCTCCGGCGCCTGCCCCACCACTCTGCCCC
CTCTCATCACCTGGCCTGGGCCCTCAACACCTTTCTCCTCTGTCCCACTTATCCCGAGGGACCCAGAAAGCAAGT
GTCACCTCTCCGTAAACCTATGTAAACCAGGTGACACTGGGTATGATCGCAGTGTGTTGCAACCCCCATGACTG
AGCAGGAGGAGCTGTGGGGAGGATGGAGGCAGGAGCTGGTCTGGGGAGCATTGACTGCCTGGGAGGTCCCCAAGA
GTCCTGGCCTGGCAGGCAGGGCTCTGACTCTAGGGCCTCAGCATGGCCTTTACCACCTCTGAGTCCCCAGTCTT
GAGCAGGATTTGGGTCTGGTGACCACCAAGGATGGGGGTTCTTGGACCAGAGCTAAGAGACAACAGGCTGCCTG
ACTCTCCAGAGCCCGCTGGGGGCCCTGTGCACATTGTTCCCTCATCCACGCTCCCCAGAGCCACTGGTCAGGA
CCACCCTCTGGACACAGCCCCAGGAGCTGGGTAGGACCAGACTGGTCTCCACATTCCATATGCCCGGGCATGGG
GCACAGGCCCAAGGGGCACTGTCTGTCTGCAGATGCTGCGGGAATCACAGATCAGGAACACAACGTGGTGGCA
CTGAAGGAGGCCATCAAGGACAAGGAGGAACCTCTGCACATAGCCAGACCCGGCTGTACCTGCTCTACACCGG
CCCAACATGCAGCTGTGCCGGAAGCAGCCAGTTCAGGTACTGCCTGGGCCTCTGAGGCAGTCCAGGTGCCCC
CGTCCACCTCCTCGCTGTGACCCCTCTATAAACACTCCAATCTCCACACACATCCCCACAGGTGCTGAGAG
GGGAGGGAGAGTTTGGCGCCACACACAACACGCAAGCACGCCTTAAACACACAGATATAGACATGACACTGGGCA

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FIGURE 3946B

GGTCATGGGTCGGGGGCCCTTCCAGTGCCAGGGACCTGTGCCACGTGGTCTCACCCCACCCTGTGCTACCTCATC
TTCCCGGGAGGAAGCTCCTTCAGACAAGGTGAGCTCCTGGAGGCCACGGGGACAGAGAGGCCAGAGAGGGCCATT
CCCTGCTGCCTTGAGGGTGCTGTCCCCACCTCTGGTGGAAGTATGACCTACGCCTGGGCTACAGGCATAGATGG
GCCGTCTTTTGTTCCTTGTTAACGGATGCCTGGTGGCCCCCTTCTGAGCCTAAGTACCTTTCTTCCTTCCCTG
CCCCTCAGTTCTTCAAGGAAGTGGGTGCCTCCTTCCGTCAAATATCAGGAATGAAAAGAACTGAGCCTGGTCGG
CTGAGGCCAGTCCTGTCTGTCTCAGGGTCGAGATTGCACGCGGGTCACTCATTCCCCTGAGGCCCCGCGCTCCCTG
GGAGGACCTCGTAATTTATGCTCTGCCCTAGAGCCGCTTTCCTGGTGGGATCCTTTTCATGGCGTCTTCCCAGGA
CCTCCTGCCAGCTCCCATTGGGAGTTTTGGGTCCCCTGCACCCCGGTAGGTGCATACTTCTGCCCTCCCCAGCCC
CAGCTCACACACCCAACACCCCCAAGCTGGTGAGTGAGGTGGAGGAGCTGAACATGTCCATCACAGCGCTGTGGG
AGAAGCTTCTAGAAGGGGAGCAGTCCCTTTGCAACCTCGAGGACATCCACATGAGCCTGGAGAAGGATGTTACCG
CCATGACCAACAGTCTCTTCATCGACCGCCAGAAGTGCATGGCCCATCGTACTTGCTACACCCCCATCCTGCAGC
TGGCTGGCTACCAGTGAGCAGCGGCACGGTGCTTCCCCCAATCCCCCAAATAAACAGTGCATTAGCTTTC

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FIGURE 3947

MFPVSSGCFQEQQETNKSLPRSASTPETRTKFTQDNLCHAQRERLDSANLWVLVDCILRDTSEDLGLQCDAVNLA
FGRRC EELEDVRHKLQHHLHKVGHPEPRRRLRRLPTTLPLITWPGPSTPFSSVPLIPRDPRSKCHLSVNLCKTR

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FIGURE 3948

ATGCTTCCGGCTCCCCTCTGGAGACACGGGCCGGCCCCCTGCGTGTGGCACGGGCGGGCCGGGAGGGCGTCCCCG
GCCCCGGCGCTGCTCCCGCGTGTGTCTGGGGTTGACCAGAGGGCCCCGGGCGCTCCGTGTGTGGCTGCGATGGTG
GCGTTTTTTGGGGACAGGCGTCCCTCGGCGCCTCTGCGGGCCCCGAGGAGGAGCGGCTGGCGGGTGGGGGGAGTGTG
ACCCACCCTCGTTACGCGACCCCCGAGCGGTCGGCGTCCCCCAACTTCTTAGAGGGACAAGTGGCGTTTACGCCAC
CCGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGTCCGGGGCTGCACGCGCGCTACACTGACTGGCTCA
GCGTGTGCCTACCCTACGCCGGCAGGCGCGGGTAACCCGTTGAACCCCATTCGTGATGGGGATCGGGGATTGCAA
TTATTCCCATGAACGAGGAATTCCCACTGGCCTTTGCCGGGCGACCCAGGGGAACCGCGTTGATGCTGCCTTC
GGATCCTCCGGCGAAGACTTCCACCGGATGCCCCGAAACTCATACCCAAGGGGCAGCTCGTCACCAGGGATGTG
GAAGTACTCTACATCATCTCACACGGCTTTACCACTTTACCTCCGTCATCGACAGAATTTACAACTCTACGTT
TCCCTTTCATAA

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FIGURE 3949

CGGGAGAAAGCCCCGCCCCCGGCGCCCGCTCCCACTCCTGATTGGCCGGGCCAGCCCCGGGGAGGCCCGGCGGGAC
 CCGGGCCCGCTCTCAGCTATAAAGATAGCCCCGGCATGACAGCCGCGGCGAAGCTCTTCTAGTTTCATCTGCTGG
 CCGGCTCTCAGTCCCCGTGGCGCCCCCTTTCTCTTTGTCCCAGAGCGCTCTCGACTCCACCATGCCAAGGGGATT
 CCTGGTGAAGCGAACTAAACGGACAGGCGGCTTGTACCGAGTTCGCTTGGCGGAGCGTGTCTTCCCTCTGCTGGG
 GCCCCAGGGGGCGCCGCCCTTCTTGGAGGAGGCTCCCAGCGCCTCCTTGCCCGGCGCGGAGCGGGCGACACCCCC
 CACCCGAGAGGAACCAGGAAAGGGGTTGACGGCGGAGGCGGCCCGGGAACAGTCGGGGTCGCCATGTCGGGCGGC
 TGGGGTGAGCCCGGGGACGGGCGGGCGGGAAGGCGCGGAGTGGCGGGCGGGTGGCAGGGAAGGTCCCGGGCCAG
 CCCCAGCCCCAGCCCCAGTCCAGCGAAGCCGGCAGGCGCAGAGCTGCGTCGGGCGTTCCTGGAGCGCTGCCTCAG
 CTCGCCCCGTCTCCGCCGAGTCTTTCCCCGGGGGCGCCGCCCGCTGGCCGCTTTCTCCTGCTCCGTGGCGCCAGC
 AGCCGACACCGACCCCCGGGGGAGCAGTTTCTGCTGCCGCTTCGGGCGCCGTTCCAGAGCCCGCGCTTCAGCCGA
 CCCTGCGCCCCCTCTCGGCCGCCCTTCAGAGTCTGAAGCGGGCGGCCGGCGGCGAGCGCCGCGCAAGGCACCCAC
 GGACTGCGCGTCTGGACCCGCGGCGCGGGAATCAAGAAGCCAAAGGCCATGAGGAAGTTGAGCTTTGCCGATGA
 GGTGACCACATCCCTGTCTGGGCTTGAAGATCAAGGAGGAGGAGCCCGGAGCGCCGTCCCGGGGCTTGGGGG
 CAGCCGCACGCCACTGGGGGAGTTTCATCTGCCAGCTGTGCAAGGAGCAGTACGCAGACCCCTTCGCGCTGGCCCA
 GCACCGCTGCTCCCGCATCGTGCGCTAGAGTACCGCTGCCCTGAGTGCACAAAGGTGTTAGCTGTCTCTGCGAA
 CCTGGCCTCCCATCGCCGCTGGCATAAGCCGCGTCTGCGGCTGCAAACGCCGCCACAGTCTCCTCCGCCGACGG
 GAAGCCGCTTCTTCTGCTGCTTCTGCTCCTCCCGGGACTCCGGGGCCATTGCATCTTTTCTGGCGGAGGGAAAGGA
 GAACAGCCGAATAGAGCGGACTGCGGATCAGCACCCGAGGCCAGGGACAGCTCCGGGGCGGATCAGCACCCGGA
 CAGCGCCCCGAGGCAGGGCCTCCAGGTGCTGACGCATCCAGAGCCACCGCTGCCTCAGGGCCCCCTACACGGAGGG
 GGTGTTGGGGCGCCGGGTACCTGTGCCGGGAGTACCAGTGGTGGCAGGGGATCCGAGATTTTCGTGTGCCATA
 TTGCCACAAAAGTTTCGTGCGCAAGCCTATCTGCGCAAGCAGTACGACTCACGAGGCGGGCTCGGCCCGTGC
 GCTAGCGCCGGGCTTTGGCTCCGAACGCGGTGCCCATCTGACGGGAGTGCCAGCAAATTTTCTCGTGCAAGCACTG
 TACAGCAGATATCAGGGAGAAGCACCAGGTGTGGCATGTGTCCGCGAGGAGCTGCTCCTGCCGCTCTGGCGGG
 GGCTCCTCCCGAAACGTCCGGGCCCTAGCGGGCATCTGACGGGAGTGCCAGCAAATTTTCTCGTGCAAGCACTG
 CCCGTCCACTTTTTTTAGCTCTCCAGGGCTGACCCGGCACATCAATAAGTGCCACCCCTCAGAAAGCCGGCAAGT
 GCTGCTGCTGCAGATGCCACTGCGGCCTGGCTGCTGAGGGACGAGAGACCAGGATGATTTTCAGGTTGGCCTTAG
 AGGAAACAGATCATGGGAATTTCTGTGGGGCTTTCTTCAACTTGCAAGTTTACTTTTATTCTTCTATGTTTTA
 ATCCCTTAAATTTCTCCCTGTAGTCAATGTTCCACCAGAGGAGCGGACAGTGAAATGTAATATCCCTCTCTAGAG
 CAGGTATGTATATGGTATAAACCTTGAGATCAAAGACTGTCAGCTTTAAATCCTTCTCACTTTCCCACTAAAAT
 AGGATTTTTTCCCTTAAAACTCTGGAGACCCTAACGAATCCTATATGATTTGTAATTCCTATGGAAAGTCGCGGT
 GAATGCGTGATGTCTCAATGTCCACAAAGGATTCTGGCTACCCTTTGGTAGCCAATGTTTTTTTTGTCTTGTC
 TCACAGGCGCCTATACAGCTTCTGTCTCAATAGGGTCAGATATTTTGCACTGTATATTCTGTGAATTAAGTTA
 TGTGATTGGTGTCAAACCTTAAGGAGATTCAAGACCTGGCAGAAAATGTAAGAGGATTTTTGCTGCTTTTGGGGTG
 CATGGGGATCTCCCTGTAAACTTTCTTTGCCAATTATATGTACATGTCCATTCTTAAGTTGGTGTGTTGGAGG
 TGGGGAGGATGCTACTTTACTGGAGTTGAGACACCCCTAAAATTTCTACCCTCAGCTATTTTGTGGGCAGTATT
 CAGGAAGAGCTACTTCAAACCTTTCTTTAAATGGCTTTTTTGAAATACAGAAGTCGTTTCTCAAGTTTGACTGT
 TTTAATGGGGTTTACCCAAATTGTTTAAATGCTTCTGCTGTAAATGTCATACTGTGTATTCTTATGAAAATATG
 TACAGCTTAAGGAAGATGTTAACACCTGTAATCCACTAAGGAAGTGAATGGCAATTGCTCAATATTCAGTATTT
 TCTTTTTCAGCGGCAACTTGTTTTTGAATTTTTTAAAAAACCATTTTCAGTGTACATTGTGTACTAATCCCTACTA
 GCCAGTTTGGGACATTGGCTGAGCACTGCCTGACAGAAAGCCCGTATTTGTAAGATGCTTACCACCAAATAAATG
 TACATAGACTGTG

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FIGURE 3950

TGCCGCCGTCCCGCCCGCCAGCGCCCCAGCGAGGAAGCAGCGCGCAGCCCGCGGCCAGCGCACCCGCAGCAGCG
CCCGCAGCTCGTCCGCGCCATGTTCCAGGCGGCCGAGCGCCCCAGGAGTGGGCCATGGAGGGCCCCCGCGACGG
GCTGAAGAAGGAGCGGCTACTGGACGACCGCCACGACAGCGGCCTGGACTCCATGAAAGACGAGGAGTACGAGCA
GATGGTCAAGGAGCTGCAGGAGATCCGCCTCGAGCCGCGAGGAGGTGCCGCGCGGCTCGGAGCCCTGGAAGCAGCA
GCTCACCGAGGACGGGGACTCGTTTCCTGCACTTGGCCATCATCCATGAAGAAAAGGCACTGACCATGGAAGTGAT
CCGCCAGGTGAAGGGAGACCTGGCCTTCCTCAACTTCCAGAACAACCTGCAGCAGACTCCACTCCACTTGGCTGT
GATCACCAACCAGCCAGAAATTGCTGAGGCACCTTCTGGGAGCTGGCTGTGATCCTGAGCTCCGAGACTTTCGAGG
AAATACCCCCCTACACCTTGCCTGTGAGCAGGGCTGCCTGGCCAGCGTGGGAGTCCGACTCAGTCCCTGCACCAC
CCCGCACCTCCACTCCATCCTGAAGGCTACCAACTACAATGGCCACACGTGTCTACACTTAGCCTCTATCCATGG
CTACCTGGGCATCGTGGAGCTTTTGGTGTCTTGGGTGCTGATGTCAATGCTCAGGAGCCCTGTAATGGCCGGAC
TGCCCTTCACCTCGCAGTGGACCTGCAAAATCCTGACCTGGTGTCACTCCTGTTGAAGTGTGGGGCTGATGTCAA
CAGAGTTACCTACCAGGGCTATTCTCCCTACCAGCTCACCTGGGGCCGCCAAGCACCCGGATACAGCAGCAGCT
GGGCCAGCTGACACTAGAAAACCTTCAGATGCTGCCAGAGAGTGAGGATGAGGAGAGCTATGACACAGAGTCAGA
GTTACCGAGTTCACAGAGGACGAGCTGCCCTATGATGACTGTGTGTTTGGAGGCCAGCGTCTGACGTTATGAGC
GCAAAGGGGCTGAAAGAACATGGACTTGTATATTTGTACAAAAAAAAGTTTTATTTTCTAAAAAAGAAAAA
GAAGAAAAAATTTAAAGGGTGTACTTATATCCACACTGCACACTGCCTGGCCCAAACGCTTATTGTGGTAGGA
TCAGCCCTCATTTTGTGCTTTTGTGAACTTTTGTAGGGGACGAGAAAGATCATTGAAATTCTGAGAAAACCTC
TTTTAAACCTCACCTTTGTGGGGTTTTTGGAGAAGGTTATCAAAAATTTTCATGGAAGGACCACATTTTATATTTA
TTGTGCTTCGAGTGACTGACCCAGTGGTATCCTGTGACATGTAACAGCCAGGAGTGTTAAGCGTTCAGTGATGT
GGGGTGAAAAGTTACTACCTGTCAAGGTTTTGTGTTACCCTCCTGTAAATGGTGACATAATGTATTGTGGTAAT
TATTTTGGTACTTTTATGATGTATATTTATTAAACAGATTTTACAAATG

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FIGURE 3951

GAGTTCGGCATGCAAGAGCGGAAGAAACGCGGCTGGTACCCCGGAAGCAGTCGCTGCAACTTCCGGGAGGTGCTT
GTGTGCCTGGTGCGGGAGCTACGGGGCCCAGGGATTGTGTTTAAAGTAGTGCTTCTACCAACATGTCCTCCCGTGGTT
CCAGCGCCGGTTTTGACCGCCACATTACCATTTTTTACCCGAGGGTCGGCTCTACCAAGTAGAATATGCTTTTA
AGGCTATTAACCAGGGTGGCCTTACATCAGTAGCTGTCAGAGGGAAAGACTGTGCAGTAATTGTCACACAGAAGA
AAGTACCTGACAAATTATTGGATTCCAGCACAGTGACTCACTTATTCAAGATAACTGAAAACATTGGTTGTGTGA
TGACCGGAATGACAGCTGACAGCAGATCCCAGGTACAGAGGGCACGCTATGAGGCAGCTAACTGGAAATACAAGT
ATGGCTATGAGATTCTGTGGACATGCTGTGTAAAAGAATTGCCGATATTTCTCAGGTCTACACACAGAATGCTG
AAATGAGGCCTCTTGGTTGTTGTATGATTTTTAATTGGTATAGATGAAGAGCAAGGCCCTCAGGTATATAAGTGTG
ATCCTGCAGGTTACTACTGTGGGTTTAAAGCCACTGCAGCGGGAGTTAAACAACTGAGTCAACCAGCTTCCTTG
AAAAAAAAGTGAAGAAGAAATTTGATTGGACATTTGAACAGACAGTGGAAACTGCAATTACATGCCTGTCTACTG
TTCTATCAATTGATTTCAAACCTTCAGAAATAGAAGTTGGAGTAGTGACAGTTGAAAATCCTAAATTCAGGATTC
TTACAGAAGCAGAGATTGATGCTCACCTTGTTGCTCTAGCAGAGAGAGACTAAACATTGTGTTAGTTTACCAGA
TCCGTGATGCCACTTACCTGTGTGTTTGGTAACAACAACCAACATCATGGAGGTCCCTGGATTGAAAAAGGAGC
CTCTCCCACTCCTCCTACCACCGAAGTGGTTAGGACTCTATATAAATAAAAAACAAGGCTTTTGG

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FIGURE 3952

MSRGSSAGFDRHITIFSPEGRLYQVEYAFKAINQGGLTSVAVRGKDCAVIVTQKKVPDKLLDSSTVTHLFKITEN
IGCVMTGMTADSRSQVQRARYEAANWKYKYGYEIPVDMLCKRIADISQVYTQNAEMRPLGCCMILIGIDEEQGPO
VYKCDPAGYYCGFKATAAGVKQTESTSFLEKKVKKKFDWTFEQTVETAITCLSTVLSIDFKPSEIEVGVVTVENP
KFRILTEAEIDAHLVALAERD

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FIGURE 3953

CTCTCGGCTTTTCGGCTTGGAGGAGGCCAAGGTGCAACTTTCTTTGGTCATTCCGCACCAGCCGCCTCCACCATGC
CGCCAAAGTTTCGACCCCAACGAAATCAAAGTCGTATACCTGAGGTGCACCGGAGGTGAAGTCGGTGCCACTTCTG
CCCTGGCCCCCAAGATCGGCCCCCTGGGTCTGTCTCCAAAAAGGTTGGTGATGACATTGCCAAGGCAACGGGTG
ACTGGAAGGGCCTGAGGATTACAGTGAACTGACCATTGAGAACAGACAGGCCAGATTGAAGTGGTGCCTTCTG
CCTCTGCCCTAATCATCAAAGCTCTTAAGGAACCACCAAGACACAGAAAGAAATAGAAAAACATTAAACACCGTG
GGAATATCACTTTTGATGAGATCGTCAACATTGCTTGACAGATGCGGCACTGATCCTTAGCCAGAGAACTCTCTG
GAACCATTAAAGAGATCCTGGGGACTGCCCAGTCTGTGGGCTGTAACGTTGATGGCCGCCACCCTCATGACATCA
TAGATCACATCAACATTGGTGCTGTGGAATGCCAGCCAGTTAAGCACAAAGGAAAATATTTTCAGTAAAGAATCA
TTTGACAACCTGGTGA

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FIGURE 3954

MPPKFDPN EIKVVYL RCTGGEV GATSALAPKIGPLGLSPKKVGDDIAKATGDWKGLRITVKLTIQNRQAQIEVVP
SASALI IKALKEPPRRHRKKRKT LNTVGISLLMRSSLLDRCGTDSLARELSGTIKEILGTAQSVGCNVDGRHPHD
IIDHINIGAVECPAS

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FIGURE 3955

GAAGAGGCGAGAACGACCCCCGGACTGACCAAAGCCCGCGCGCAGCTGCATCCCGCATCCAGCACCTACATCCCG
CCACCGTCGTGGCCGTCAACATGCCCAAGAGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGGTGAAGG
ACGAACCGCAGAGAAGATCCGCGAGGTTGTCTGCCAAACCTGCTCCTCCAAAGCCAGAGCCCAAGCCTAGAAAGT
CCCCTGTAAAGAAGGGAGAGAAGGTACCCAAAGGGAAAAAGGGAAGCTGATGCCCAGGAGGAGGGATTCCCTG
ACTCTGACACACATGGCCACCTTGGCACAAAAGCCTTGTGGTATAGAAAAACAAATTCGTTTTTATGTCCTCTTC
TCCTTTTCCATCTTTCAGCATAGACTTAACTCCCTTGAGCCGAGACATCTGTTGGGACCTGACCCCCAGTCATTG
ATTACCAAGTGTGTCAGGCAATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAAGAGCAGTGGTTC
CATTTCTAGATTGTGGATCTTCAGATAAAATTCGCCATTTTCATTTCACTTCCTGAAAGTCAGGGTCGGCTTGTG
AAAAGTTGTTAAACAACATGCTAAATGTGAAATGTCAACCCTCACTCTAAACTTTCCCTGTTTCAGAGCATCAGAT
GAAGACTTCATTGGGTTTTATAGTGGCTTTCTGATTTTTGGTAGTCCATTGAAGAAGGGAGTTTGAAAGTTGTTG
TATACTGTAAACAATTGTCTGCCCATGTCCTGCCTGAAATACCA

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FIGURE 3956

MPKRKAEGDAKGDKAKVKDEPQRRSARLSAKPAPPKPEPKPRKSPVKKGEKVPKGKKGKADAE EEGFPDSDTHGH
LGTKALWYRKTN SFLCPLLLFHL SA

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FIGURE 3957

ACTTTACGCAGGCGCGTTAGGTCCTAGTCGCTATGCGTGTGCTTGTGGGTGGCGGGACAGGCTTCATTGGGACAG
CCCTAAGCCAGCTGCTGAATGCCAGAGGCCACGAAGTGACGTTGGTCTCCCGAAAGCCCCGGGCCGGGATCA
CGTGGGATGAGCTCGCTGCATCGGGGCTGCCGAGCTGCGATGCCGCCGTCAACCTGGCCGGAGAGAACATCCTCA
ACCCTCTCCGAAGATGGAATGAAACCTTCCAAAAAGAGGTAATCGGCAGCCGCCTAGAGACCACCCAATTGCTGG
CTAAAGCCATCACCAAAGCCCCACAACCCCCAAGGCCTGGGTCTTAGTCACAGGTGTAGCTTACTACCAGCCCA
GTCTGACTGCGGAGTATGATGAAGACAGCCCAGGAGGGGACTTTGACTTTTTCTCCAACCTCGTAACCAATGGG
AAGCTGCAGCCAGGCTTCTGGAGATTCTACACGCCAGGTGGTGGTGCCTCAGGGGTTGTGCTGGGCCGTGGGG
GTGGTGCCATGGGCCACATGCTGCTGCCCTTTTCGCTGGGCCTGGGGGGCCCCATCGGCTCAGGCCACCAATTCT
TCCCCTGGATACACATCGGGGACCTGGCAGGAATCCTGACCCATGCCCTTGAAGCAAACCACGTGCACGGGGTCC
TGAATGGAGTGGCTCCATCCTCCGCCACTAATGCTGAGTTTGCCCAGACCTTGGGTGCTGCCCTGGGCCGCCGAG
CCTTCATCCCTCTCCCCAGCGCTGTGGTGCAAGCTGTCTTTGGGCGACAGCGTGCCATCATGCTGCTGGAGGGCC
AGAAGGTGATCCACAGCGAACACTGGCCACTGGCTACAGTATTCTTCCCAGAGCTAGGGGCTGCCCTAAAGG
AAATTGTAGCCTAAGTAGGTCGTGGCAAGGGCCTGAGGCCTGTTCTCAGAGGCTCCAGGTTAGGCACGTGAA
TAGGCTCAGCTCCTCTAGAGAGCTGAAGCCATCTGGTTCTTAGATTCTCTCCAGTCTCTTTCCCATTGTTCT
GTTGCTCCACCTTATTGTCTCAAGGCCGTAATCTCATCAGGTTGGGACATTAATCTTTTCAACTCCTTGTAAGAT
TTCCCAGTTTGGTTTCTCTACATGTCTGCAGCTGCCCCACTTCTCCTTTACGCTGTGTAGAGAATGCTCTGCAG
TTTAGGCAATAAAAAATAAATTGTCTCACT

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FIGURE 3958

ATGTCGTGCGTCAAGTTATGGCCCAGCGGTGCCCCGCCCCCTTGGTGTCCATCGAGGAAGTGGAGAACCAGGAG
CTCGTCGGCAAAGGCGGGTTTCGGGCACAGTGTTCGGGGCGCAACATAGGAAGTGGGGCTACGATGTGGCGGTCAAG
ATCGTAAACTCGAAGGCGATATCCAGGGAGGTCAAGGCCATGGCAAGTCTGGATAACGAATTCGTGCTGCGCCTA
GAAGGGGTTATCGAGAAGGTGAACTGGGACCAAGATCCCAAGCCGGCTCTGGTGACTAAATTTCATGGAGAACGGC
TCCTTGTCGGGGCTGCTGCAGTCCCAGTGCCTCGGCCCTGGCCGCTCCTTTGCCGCTGCTGAAAGAAGTGGTG
CTTGGGATGTTTTACCTGCACGACCAGAACCCGGTGCTCCTGCACCGGGACCTCAAGCCATCCAACGTCCTGCTG
GACCCAGAGCTGCACGTCAAGCTGGCAGATTTTGGCCTGTCCACATTTAGGGAGGCTCACAGTCAAGGACAGGG
TCCGGGGAGCCAGGGGGCACCCCTGGGCTACTTGGCCCCAGAAGTGTGTTAAGTAAACCGGAAGGCCTCCACA
GCCAGTGACGTCTACAGCTTCGGGATCCTAATGTGGGCAGTGCTTGCTGGAAGAGAAGTTGAGTTGCCAACCGAA
CCATCACTCGTGTACGAAGCAGTGTGCAACAGGCAGAACCGGCCTTCATTGGCTGAGCTGCCCCAAGCCGGGCCT
GAGACTCCCGGCTTAGAAGGACTGAAGGAGCTAATGCAGCTCTGCTGGAGCAGTGAGCCCAAGGACAGACCCTCC
TTCCAGGAATGCCTACCAAAAAGTGAAGTCTTCCAGATGGTGGAGAACAATATGAATGCTGCTGTCTCCAGC
GTAAAGGATTTCTGTCTCAGCTCAGGAGCAGCAATAGGAGATTTCTATCCCAGAGTCAGGCCAAGGAGGGACA
GAAATGGATGGCTTTAGGAGAACCATAGAAAACCAGCACTCTCGTAATGATGTCATGGTTTCTGAGTGGCTAAAC
AAACTGAATCTAGAGGAGCCTCCCAGCTCTGTTCTAAAAAATGCCGAGCCTTACCAAGAGGAGCAGGGCACAA
GAGGAGCAGGTTCCACAAGCCTGGACAGCAGGCACATCTTCAGATTCGATGGCCCAACCTCCCCAGACTCCAGAG
ACCTCAACTTTTCAGAAACCAGATGCCCAGCCCTACCTCAACTGGAACACCAAGTCTTGACCCCGAGGGAATCAG
GGGGCTGAGAGACAAGGCATGAACTGGTCTGCAGGACCCCGAGCCAAATCCAGTAACAGGGCGACCGCTCGTT
AACATATACAAGTCTGCTGTTGGGGTGCAAGTTGGAGACAACAATACTTACTGACTATGCAACAGACAAGTGCCTTGCCC
ACATGGGGCTTGGCACCTTCGGGCAAGGGGAGGGGCTTGAGCAGCCCCCACCAGTAGGTTGCAAGAAGGCCCT
AAAGATCCTGAAGCCTGGAGCAGGCCACAGGGTTGGTATAATCATAGCGGGAATAA

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FIGURE 3959

GGGGCAAGGGAAGCTAGTAGCGGAGCCGGAAGTGAGGCACCCCTCGGGCTCGAGACAGCGGGGACGTTTAAAGCTG
AGCGACCCAGTGCCACTGGAGACGGTCAGCTTCTCCACTCAGGCTCCTCCAGCCCGAGCCAGAAGACCCCCCTCCC
CCAGAATTCTGGGGGCCGATGGAAGGGAGCCGAGTCAGATCGCGAGGTACCCAGAGCCGACAGACCCGGAGCGACA
GGGAGTTGCCAGAAGCCCCGCCCTAGGAGTGATCGGAAAGCCTCACCCATCCGGGTGAGGAACCCGGAGGGACC
GCCTCCGGGCGGAGCCCGCCGACCATGGCTACGCCCCCTGGTGGCGGGTCCCGCAGCTCTACGCTTCGCCGCCGCG
GCTAGCTGGCAGGTTGTGCGCGGACGCTGCGTGGAACATTTTCCGCGAGTACTGGAGTTTCTGCGATCTCTGCGC
GCTGTTGCCCTGGCTTGGTTGCTACCGGCACCACGAACGCCCTTGTATGGGCCTAAAGGCCAAGGTGGTGGTG
GAGCTGATCCTGCAGGGCCGGCCTTGGGCCCAAGTCCTGAAAGCCCTGAATCACCACCTTTCCAGAATCTGGACCT
ATAGTGGGGATCCCAAGGCTACAAAGCAGGATCTGAGGAAGATTTTGGAGGCACAGGAAACTTTTTACCAGCAG
GTGAAGCAGCTGTGAGAGGCTCCTGTGGATTTGGCCTCGAAGCTGCAGGAACCTTGAACAAGAGTATGGGGAACCC
TTTCTGGCTGCCATGGAAAAGCTGCTTTTTGAGTACTTGTGTGCTGAGCTGGAGAAAGCACTGCCTACACCGCAGGCA
CAGCAGCTTCAGGATGTGCTGAGTTGGATGCAGCCTGGAGTCTCTATCACCTCTTCTCTTGCTGGAGACAATAT
GGTGTGGACATGGGGTGGCTGCTTCCAGAGTGCTCTGTTACTGACTCAGTGAACCTGGCTGAGCCCCATGGAACAG
AATCCTCCTCAGCAACAAAGACTAGCACTCCACAATCCCCTGCCAAAAGCCAAGCCTGGCACACATCTTCCTCAG
GGACCATCTTCAAGGACGCACCCAGAACCTCTAGCTGGCCGACACTTCAATCTGGCCCCCTCTAGGCCGACGAAGA
GTTCAGTCCCAATGGGCCTCCACTAGGGGAGGCCATAAGGAGCGCCCCACAGTCATGCTGTTCCCTTTAGGAAT
CTCGGCTCACCAACCCAGGTCATATCTAAGCCTGAGAGCAAGGAAGAATGCGATATACACAGCAGACCTAGCC
ATGGGCACAAGAGCAGCCTCCACTGGGAAGTCTAAGAGTCCATGCCAGACCCTGGGGGGAAGGGCTCTGAAGGAG
AACCCAGTTGACTTGCTGCCACAGAGCAAAAGGAGAATTGCTTGGATTGCTACATGGACCCCTGAGACTATCA
TTATTACCTCCTAGGGCCAGGAAGCCAGTGTGTCTCCGTCTCTGTGCAGCTCCGTCATTACCATAGGGGACTTG
GTTTTAGACTCTGATGAGGAAGAAAATGGCCAGGGGGAAGGAAAGGAATCTCTGGAAAATATCAGAAGACAAAG
TTTGACACCTTGATACCCACTCTCTGTGAATACCTACCCCTTCTGGCCACGGTGCCATACCTGTTTCTTCTGT
GACTGTAGAGACAGTTCTAGACCTTTGTGATAGAACTAAAATGCTCTCTGTACTCTAGTCTCCTGCCTCCTCAGC
TCTGCAAGTAGTTTAGTAGGAATGAAGTGGAAGTCCAGGCTTGGATTGCCTAACTACACTGCTAAAAATATTGT
AATCCTTAATAATTAACTTTGGATTTGTT

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FIGURE 3960

CCATGGAGTCA GCCGGGCTAGAGCAGCTCCTACGGGAGCTGCTGCTACCGGACACCGAGCGCATCCGTGCGGCCA
CGGAACAGCTCCAGATCGTTCTTCGGGCCCCCGCCGCTTTGCCGGCTCTCTGCGACCTGCTAGCCTCGGCGGCCG
ACCCCCAGATCCGCCAGTTTTCGGGCCGTGCTGACCCGAGACGACTGAACACCCGCTGGCGACGGCTGGCGGCCG
AGCAACGGGAGAGCCTCAAGTCCCTGATCCTGACGGCCCTGCAGAGAGAAACAGAGCACTGTGTGAGCCTCAGCC
TGGCCAGCTCTCAGCCACCATTTCGAAAGGAAGGCTTGGAGGCCCTGGCCACAGCTTTTGAGCTGCTTCAGC
ACAGTACCCACAGCCCCACAGCCCAGAGAGAGAGATGGGGCTTTTGCTGCTAAGTGTGGTGGTGACCTCCCGGC
CCGAGGCCCTTCCAACCCACCACGGGAGCTTCTTCGGCTTCTGAATGAGACTCTTGGTGAGGTGGGCTCTCCTG
GGCTGCTCTTCTACTCCCTGCGCACTCTGACCACCATGGCTCCCTACCTCAGCACTGAAGATGTGCCTCTCGCTC
GGATGTTGGTGCCCAAGCTGATCATGGCCATGCAGACTCTGATCCCATAGATGAGGCAAAGGCCCTGTGAGGCC
TTGAGGCTTTGGATGAACTGTTGGAGTCAGAGGTGCCGCTATCACCCCTACCTCTCTGAAGTCCCTCACATTCT
GCCTGGAGGTAGCTAGAAATGTGGCCCTGGGCAATGCGATACGCATACGTATTCTCTGCTGCCTCACTTTCTTG
TCAAAGTCAAGAGCAAGGCCTTACTGAAGAATCGTCTCCTGCCACCCTTGCTGCACACCCTTTTCCCCATTGTG
CTGCTGAGCCCCCACCAGGCCAGTTGGATCCCGAGGACCAGGATTGAGAAGAGGAAGATTGGAGATTGAGCTGA
TGGGGGAGACTCCCAAGCATTTTCGCTGTACAAGTTGTGGACATGCTGGCACTACACCTGCCCCCGAGAAGCTCT
GTCCCCAGCTGATGCCCATGTTGGAAGAGGCTTTGCGGAGCGAGAGCCCATACCAGCGCAAAGCTGGACTCCTGG
TGCTGGCCGTGCTGTCTGACGGAGCTGGCGACCACATCAGGCAGAGACTGCTGCCCCACTGCTGCAGATTGTGT
GCAAGGGCCTGGAGGACCCCTCGCAAGTTGTACGCAATGCTGCGCTGTTTGCCCTGGGCCAGTTCTCAGAAAACC
TACAGCCCCATATCAGCAGCTATTCAAGGGAGGTAATGCCACTGCTCCTCGCCTACTTGAAGTCGGTGCCTCTTG
GACACACACACCACCTAGCCAAGGCCTGCTATGCCCTGGAGAATTTTGTGGAGAACCCTAGGGCCCCAAGGTGCAGC
CCTACCTTCCGGAGCTTATGGAATGCATGCTGCAGCTTCTGAGGAACCCAGCAGTCCCCGGGCCAAGGAGCTGG
CTGTGAGCGCCCTGGGAGCCATTGCTACGGCTGCCAGGTCTCGCTGCTGCCCTACTTCCCTGCCATCATGGAGC
ACCTGCGGGAATTCTGTTAACAGGCCGTGAGGACCTTCAGCCTGTGCAGATCCAGAGCCTGGAGACACTGGGGG
TGCTGGCACGAGCAGTGGGGGAGCCCATGAGGCCGCTGGCTGAGGAATGCTGCCAGCTGGGTCTGGGCCCTCTGCG
ACCAGGTAGACGACGCTGACTTTCGGCGCTGCACGTACAGCCTATTTGCAGCCTTATCGGGTCTGATGGGTGAGG
GCCTGGCGCCCCACTTGGAACAGATCACACGCTCATGCTGCTGTCACTGCGTTCCACCGAGGGCATTGTGCCTC
AGTATGACGGGAGAGCTCCTTCTCTGTTTGACGATGAGAGTGATGGGGAAGAAGAGGAGGAGCTCATGGATG
AGGATGTGGAAGAAGAGGATGACTCAGAGATCTCAGGGTACAGCGTGGAGAATGCCTTCTTCGATGAGAAGGAAG
ACACCTGTGCTGCTGCCGTGGGGGAGATCTCTGTGAACACCAGTGTGGCCTTCTTCCATACATGGAAGTGTCTTTG
AAGAAGTATTTAACTGCTGGAGTGCCCTCACCTGAATGTGCGGAAGGCAGCCCATGAGGCTCTGGGTCACTTTT
GCTGTGCACTGCACAAGGCCTGTCAAAGCTGCCCTCGGAACCCAACTGCTGCTTTGCAGGCTGCCCTGGCCC
GAGTCGTGCCATCCTACATGCAGGCAGTGAACAGGGAGCGGGAACGCCAGGTGGTGATGGCCGTGCTGGAGGCC
TGACAGGGGTGCTCCGCAGCTGTGGGACCCTCACACTGAAGCCCCCTGGGCGCCTCGCTGAGCTCTGTGGCGTGC
TCAAGGCTGTGCTGCAGAGGAAGACAGCCTGTGAGGATACTGACGAGGAGGAGGAAGAGGAAGATGATGATCAGG
CTGAATACGACGCCATGTTGCTGGAGCAGCTGGAGAGGCCATCCCTGCCCTGGCAGCCGCGGCTGGGGGAGACT
CCTTTGCCCATTTCTTTGCCGGTTTCTTGCCATTATTGGTGTGCAAGACAAAACAGGGCTGCACAGTGGCAGAGA
AGTCCCTTTGCAGTGGGGACCTTGGCAGAGACTATTGAGGGCCTGGGTGCTGCCTCAGCCAGTTTGTGTCTCGGC
TGCTCCCTGTGCTGTTGAGCACCGCCCCAAGAGGCAGACCCCGAGGTGCGAAGCAATGCCATCTTCGGGATGGGCG
TGCTGGCAGAGCATGGGGGCCACCCTGCCAGGAACACTTCCCCAAGCTGCTGGGGCTCCTTTTCCCTCCTGG
CGCGGGAGCGACATGATCGTGTCCGTGACAACATCTGTGGGGCACTTGCCCGCTGTTGATGGCCAGTCCCACCA
GGAAACCAGAGCCCCAGGTGCTGGCTGCCCTACTGCATGCCCTGCCACTGAAGGAGGACTTGGAGGAGTGGGTCA
CCATTGGGCGCCTCTTCAGCTTCTGTACCAGAGCAGCCCTGACCAGGTTATAGATGTGGCTCCCGAGCTTCTGC
GTATCTGCAGCCTCATTCTGGCTGACAACAAGATCCCACCAGACACCAAGGCCGCACTGTTGCTGCTCCTGACGT
TCCTGGCCAAACAGCACACCGACAGCTTCAAGCAGCTCTGGGCTCACTGCCTGTTGACAAGGCTCAGGAGCTCC
AGGCTGTACTGGGCCCTCTCTAGACTGCAGGCTGCAGCCAGTCCAGAGAGAATAGAGCCTGCCCA

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FIGURE 3961

MESAGLEQLLRELLLPDTERIRRATEQLQIVLRAPAALPALCDLLASAADPQIRQFAAVLTRRRRLNTRWRRRLAAE
QRESLKSLILTALQRETEHCVSLSLAQLSATIFRKEGLEAWPQLLQLLQHSTHSPHSPEMGLLLLSVVVTSRP
EAFQPHHRELLRLLNETLGEVGSFGLLFYSLRTLTTMAPYLISTEDVPLARMLVPKLIMAMQTLIPIDEAKACEAL
EALDELLESEVPVITPYLSEVLTFCLEVARNVALGNAIRIRILCCLTFLVKVKSALLKNRLLPPLLHTLFFIVA
AEPFPGQLDPEDQDSEEELEIELMGETPKHFAVQVVDMLALHLPPEKLCPLMPMLEEALRSESPYQRKAGLLV
LAVLSDGAGDHIRQRLPPLLQIVCKGLEDPQVVRNAALFALGQFSENLPQPHISSYSREVMPLLLAYLKSVPPLG
HTHHLAKACYALENFVENLGPVQPYLPELMECMLQLLRNPSSPRAKELAVSALGAIATAAQVSLLPYFPAIMEH
LREFLLTGREDLQPVQIQSLETGLVLAARAVGEPMRFLAECCQLGLGLCDQVDDADLRRCTYSLFAALSGLMGE
LAPHLEQITTLMLLSLRSTEGIVPQYDGSSSFLLFDDDESDEEEELMDEEDVEEEDDSEISGYSVENAFFDEKED
TCAAVGEISVNTSVAFLPYMESVFEEVFKLLECPHLNVRKAAHEALGQFCCALHKACQSCPSEPNTAALQAALAR
VVPSYMQAVNRERERQVVMVLEALTGVLRSCGTLTLKPPGRLAELCGVLKAVLQRKTACQDTDEEEEEEEDDDQA
EYDAMLLEHAGEAIPALAAAAGGDSFAPFFAGFLPLLCKTKQGCTVAEKSFAVGTLAETIQGLGAASAQFVSRL
LPVLLSTAQEADPEVRSNAIFGMGVLAEHGGHPAQEHFPKLLGLLFPLLARERHDRVDRNICGALARLLMASPTR
KPEPQVLAALLHALPLKEDLEEWVTIGRLFSLFYQSSPDQVIDVAPELLRICSLILADNKIPPDTKAALLLLLT
LAKQHTDSFQAALGSLPVDKAQELQAVLGLS

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FIGURE 3962

ATCTAATGAGGAGCGAGGTGCGGTGCCCCGAAGCGCTCGCTTCCCGCGGTGCGATCTAGTCCTGCAGTAGGCGGC
CCGGGGCCACACCGCGGCCGCCAAGCCAGTGCAAGGCCAGGGGCTGACATCGCTCCCAGCGCTCGAGGACCG
AGGCCTGCTGTGGAGGACACCGTGTCTCCCTCGGGACCTGCTCTGGATTCCGGCCCCGACGTCCCCCTTGGAGCTCT
GCATCTCCAACCTGGAACCCAACCCAGAAGTCTCAAGTTTGACGCATCACGTGGCGTGCGGATCCACTGAGGGTC
CACAGAGAGGGGCGCCCATCTCCTGCGTCTCAGTTATCCTGGTGTGGGAATTCTGTGCCCTAAAGAATTCCGAC
TCAGATCCGAACGGGGATCTGGTGAATCGAGGGTGAAAGACCAGAGGGACAATGTTCTACTATCCCAACGTGCT
TCAGCGCCACACCGGCTGCTTTGCCACCATCTGGCTGGCGGCGACTCGCGGCAGCCGGTTGGTGAAGCGCGAATA
CCTGAGGGTGAATGTGGTGAACCTGCGAGGAAATCCTCAATTACGTGCTGGTACGAGTGCAACCCCGCAGCC
CGGCCTGCCGCGGCCCGCTTCTCCCTCTATCTCTCAGCCCAACTTCAGATCGGTGTGATCCGCGTCTATTCTCA
ACAATGCCAGTACCTCGCGGAGGACATCCAGCACATCTTGGAGCGCTCCACCGTGCCCGAGCTGCAGATCCGAAT
AGATATGGAGACTGAGCTACCCAGCCTGCTGCTTCTTAACACCTGGCCATGATGGAGACCCCTAGAAGATGCTCC
AGATCCCTTTTTTTGGGATGATGTCTGTGGATCCCAGACTTCTTAGTCTTTTCGATATCCCTCAGATTCCGACACT
CTTAGAGGCTGCAATCCCAGAGAGAGTTGAAGAGATCCCTCCTGAAGTTCTACAGAGCCCAGGGAGCCAGAGAG
GATTCCGGTCACTGTGCTGCCACCTGAGGCCATCACGATCCTGGAGGCAGAGCCCATACGGATGCTGGAGATTGA
GGGTGAACGGGAGCTCCCAGAGGTGAGCGCCGAGAACTGGACCTGCTGATCGCAGAGGAAGAAGAAGCTATCTT
GTTAGAAATCCCGCGGCTCCACCTCCAGCTCCTGCAGAGGTGGAAGGAATAGGAGAGGCACTGGGTCCTGAGGA
GCTGAGGCTGACAGGCTGGGAACCTGGGGCCCTACTCATGGAGGTGACCCCCCGGAGGAGCTGCGTCTGCCAGC
CCCACCCAGCCAGAGAGGAGGCCCCAGTCCCCCACCTCCTCGCCGCCGCGTCTGCGCCGTTACTGTTCTG
GGACAAGGAGACTCAGATCTCCCCGGAGAAATTCAGGAACAACCTGCAAACCAGAGCCCACTGCTGGGAATGTCC
TATGGTGCAGCCGCCGAGAGGACCATCAGAGGCCCTGCGGAGTTGTTTCAAGAACCCCAACTCTCTCTGGCTGGCT
ACCCCTGAACTACTGGGTCTCTGGACCCATTGTGCCAGCCACCCCAAAAGCCCTCAGGCGAGAGCTGCCTGA
GGAGGCAGCCGCTGAGGAGGAAAGGAGAAAGATTGAAGTTCCAAGTGAGATTGAGGTCCCGAGGGAGGCCCTGGA
GCCCAGTGTTCCCTTATGGTGTCTTTAGAGATCTCCTAGAGGCAGCTGAAGAGGAGAAGTCCCGCATCAGCCT
CATCCCACAGAAGAACGGTGGGCTGGCCTGAGGTGGAGGCGCCAGAAGCTCCTGCATTGCCCGTGGTGCCTGA
ACTCCCTGAGGTGCCCATGGAGATGCCTTTGGTGTGCCCCAGAGCTCGAGCTGCTCTCACTGGAAGCAGTGCA
CAGGGCAGTGGCACTGGAGCTGCAGGCTAACAGGGAGCCGACTTCAGCAGCCTGGTGTACCTCTCAGCCCCG
CAGGATGGCTGCCCGGGTCTTCTACCTGCTCCTGGTGTCTCAGCGCAACAGATTCTTCACGTGAAACAAGAAAA
GCCATATGGTGCCTCCTGATCCAGCCGGGGCCAGATTCCACTGAGGTTAGAGTCCATTTACAAAGCTGCCAGG
AAACCGGCCACTTCTAGTAAACCAGTCTGTCCTCACTGGGTCTTACCTCATTTCTGAATGTGCATTTCCA
GCCTTCTTGCTCTCAGAGCTATTGTTCAAGCAGAAAACAAGCTGCTTTTATTACAGT

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FIGURE 3963

MFYYPNVLQRHTGCFATIWLAAATRGSRIVKREYLRVNVVKTCÉEILNYVLVRVQPPQPGLPRPRFSLYLQAQLQI
GVIRVYSQQCQYLAEDIQHILERLHRAQLQIRIDMETELPSLLLPNHLAMMETLEDAPDFFFGMMSVDPRLPSPF
DIPQIRHLLAAIPERVEEIPPEVPTPEPREPERIPVTVLPPEAITILEAEPIRMLEIEGERELPEVSRRELDLLI
AEEEEAILLEIPRLPPPAPAEVEGIGEALGPEELRLTGWEFGALLMEVTPPEELRLPAPPSPERRPPVPPPPRRR
RRRLLFWDKETQISPEKFQEQQLQTRAHCWECPMVQPPERTIRGPAELFRTPTLSGWLPELLGLWTHCAQPPPK
ALRRELPEEAAAAEEERRKIEVPSEIEVPREALEPSVPLMVSLEISLEAAAAEKSRI SLIPPEERWAWPEVEAPEA
PALPVPELPEVPMEMPLVLPPPELELLSLEAVHRAVALELQANREPDFSSLVSPLSFRRMAARVFYLLLVLSAQQ
ILHVKQEKPYGRLLIQGPRFH

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FIGURE 3964

CCCGCCTTCCATACCTCCCCGGCTCCGCTCGGTTCTGGCCACCCCGCAGCCCCTGCCAGGTGCCATGGCCGCA
TTGTACCGCCCTGGCCTGCGGCTTAACTGGCATGGGCTGAGCCCCCTTGGGCTGGCCATCATGCCGTAGCATCCAG
ACCCTGCGAGTGCTTAGTGAGATCTGGGCCAGCTTCCCACTGGCATTGAGATTTTGTAGAGCACAGTGCCCGC
CTGTGCCAACCAGAGGGCATCCACATCTGTGATGGAACAGGGCTGAGAATACTGCCACACTGACCCTGCTGGAG
CAGCAGGGCCTCATCCGAAAGCTCCCCAAGTACAATAACTGCTGGCTGGCCCGCACAGACCCCAAGGATGTGGCA
CGAGTAGAGAGCAAGACGGTGATTGTAACCTCTCTCAGCGGGACACGGTACAACCTCCCGCCTGGTGGGGCCCGT
GGGCAGCTGGGCAACTGGATGTCCCCAGCTGATTTCCAGCGAGCTGTGGATGAGAGGTTTCCAGGCTGCATGCAG
GGCCGCACCATGTATGTGCTTCCATTACAGCATGGGTCTGTGGGCTCCCCGCTGTCCCGCATCGGGGTGCAGCTC
ACTGACTCAGCCTATGTGGTGGCAAGCATGCGTATTATGACCCGACTGGGGACACCTGTGCTTCAGGCCCTGGGA
GATGGTGACTTTGTCAAGTGCTGCACTCCGTGGGCCAGCCCCTGACAGGACAAGGGGAGCCAGTGAGCCAGTGG
CCGTGCAACCCAGAGAAAACCTGATTGGCCACGTGCCCGACCAGCGGGAGATCATCTCCTTCGGCAGCGGCTAT
GGTGGCAACTCCCTGCTGGGCAAGAAGTGCTTTGCCCTACGCATCGCCTCTCGGCTGGCCCGGGATGAGGGCTGG
CTGGCAGAGCACATGCTGATCCTGGGCATCACCAGCCCTGCAGGGAAGAAGCGCTATGTGGCAGCCGCCTTCCCT
AGTGCCTGTGGCAAGACCAACCTGGCTATGATGCGGCTGCACTGCCAGGCTGGAAAGTGAGTGTTGGGGGAT
GATATTGCTTGGATGAGGTTTGACAGTGAAGGTCGACTCCGGGCCATCAACCCTGAGAACGGCTTCTTGGGGTT
GCCCCCTGGTACCTCTGCCACCACCAATCCCAACGCCATGGCTACAATCCAGAGTAACACTATTTTTACCAATGTG
GCTGAGACCAGTGATGGTGGCGTGTACTGGGAGGGCATTGACCAGCCTCTTCCACCTGGTGTTACTGTGACCTCC
TGGCTGGGCAAACCTGGAAACCTGGTGACAAGGAGCCCTGTGCACATCCCAACTCTCGATTTGTGCCCCGGCT
CGCCAGTGCCCCATCATGGACCCAGCCTGGGAGGGCCCCAGAGGGTGTCCCCATTGACGCCATCATCTTGGTGGC
CGCTCTGAGTCCACTGCTGCAGCAGAACACAAAGGGAAGATCATATGCACGACCCATTTGCCATGCGGCCCTTT
TTTGGCTACAACCTCGGGCACTACCTGGAACACTGGCTGAGCATGGAAGGGCGCAAGGGGGCCAGCTGCCCCGT
ATCTTCCATGTCAACTGGTTCCGGCGTGACGAGGCAGGGCACTTCTGTGGCCAGGCTTTGGGGAGAAATGCTCGG
GTGCTAGACTGGATCTGCCGGCGGTTAGAGGGGGAGGACAGTGCCCGAGAGACACCCATTGGGCTGGTGCCAAAG
GAAGGAGCCTTGGATCTCAGCGGCCTCAGAGCTATAGACACCACTCAGCTGTTCTCCCTCCCAAGGACTTCTGG
GAACAGGAGGTTCTGTGACATTGCGAGCTACCTGACAGAGCAGGTCAACCAGGATCTGCCCCAAAGAGGTGTTGGCT
GAGCTTGAGGCCCTGGAGAGACGTGTGCACAAAATGTGACCTGAGGCCCTAGTCTAGCAAGAGGACATAGCACCC
TCATCTGGGAATAGGGAAGGCACCTTGCAAAAATATGAGCAATTTGATATTAACTAACATCTTCAATGTGCCAT
AGACCTTCCACAAAGACTGTCCAATAATAAGAGATGCTTATCTATTTT

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FIGURE 3965

MAALYRPGLRLNWHGLSPLGWPSCRSIQTLRVLSGDLGQLPTGIRDFVEHSARLCQPEGIHICDGTEAENTATLT
LLEQQGLIRKLPKYNNCWLARTDPKDVARVESKTVIVTPSQRDIVQLPPGGARGQLGNWMSPADFQRAVDERFPG
CMQGRMTMYVLPFSMGPVGSPLSRIGVQLTDSAYVVASMRIMTRLGTPVLQALGDGDFVKCLHSVGQPLTGQGEPV
SQWPCNPEKTLIGHVPDQREIISFGSGYGGNSLLGKKCFALRIASRLARDEGWLAEHMLILGITSFAGKKRYVAA
AFPSACGKTNLAMMRPALPGWKVECVGDDIAWMRFDSEGLRLRAINPENGFFGVAPGTSATTNPAMATIQSNTIF
TNVAETSDGGVYWEGIDQLPPGVTVTSWLGKPKWPGDKPECAHPNSRFCAPARQCPIMDPAWEAPEGVPIDAI
FGGRRPKGVPLVYEAFNWRHGVFVGSAMRSESTAAAEHKGKIIMHDPFAMRPFFGYNFGHYLEHWLSMEGRKGAQ
LPRIHFVNWFRRDEAGHFLWPGFGENARVLDWICRRLEGEDSARETPIGLVPKEGALDLSGLRAIDTTQLFSLPK
DFWEQEVDIRSYLTEQVNQDLPKEVLAELEALERRVHKM

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FIGURE 3966

TACATTGGGTCTACTGCACAAATTACAGGGCTCCAAGTGTCTTATGAGAGCAGGACTTGGGCTGACCATGTCTCT
 CTGCCCTCACCCATGCTCTGCTCTGATTTTCAGATCCTAAGTGTGAACGTGAAGTCCCCAGCCCTGCTGCTGAGCC
 AGTTGCTGCCCTACATGGAGAACAGGTATGGCAGGGCGGGGGTGGGGACCAAGTCCGAGTTGGGGACCTGAGGTGG
 GCACAGAAATACAGTCGGTAGCACAGCCAGTAGTGGGTAGAGGACAGAAGAGGTCTGGGATCTCCACATCCCTCA
 TCTTCTTGCTCCTGCCTCCCCATCTGTGTGGCTGCCATTCCCAATTCCAGTGGCTGCAGGATGAGAGTAGTATTCC
 AGGGGCCCAGGCATAGCCTCCTTGGCCTTGACATCAGCAGGTTTGGGACAAGGCTATGCTTTAACTCCTTGACCT
 TGTGGGCTGGTCATTGTACCTTACCTGCTCTCTGTTCTTACCAACTTAAAACCAATGACAGGGTTAGCCCCATT
 CCTCTCCATAGGAAAAAGCCTGTCCCAGACCTCTCCTCATGCCTGCGCTTGGTCTCCAGGGACCCCTGCCTGTGTT
 CCAGGTCCTGCAGATCTGACTGTACCCCTCACAGACACACCCCTTAGGAACTGGCCAGGGGCTGTCTTCAGTAGAA
 GGAAAGTTCCCTGACTGTCACTTCTGGTCTCCCTTACCCCATCTGCTCCTTAGAGGTTGCTCATTGATAGGCACTC
 ACCATCAGCCTTGGGTGCCTCTTACAAAGCCCACCCTGCCCTCTCCTTCAAGCACCTGGCAAGAGAGGAAGCAG
 AAGATAAGGGTTCTGAGCATGGACATCGTATTTATGAGAAATAGGCATGGAATCCTAGCTCTGCCGTGTATTGGC
 TGGTACTAAACCTTTCTGAGCCTCAGTTTTCTGAACTCTGAGATGGGGACAGTAATAGGACCTGTGTTGCTTCTG
 TGAGGGTTGCATCATTAAATGAACCTCATGATAGTGTACCATCAGTGGTAAGCTCTTAGCTTCAGCTTCTCTTAT
 GTTTGTCTTGTCTCAGGAGGGGTGCTGTATCCTGGTCTCTTCCATTGCAGCTTATAATCCAGTAGTGGTAAGTG
 CTTGGTCTTGTGCTCCTGAGTGGTATAGGGTGAGGGGCACTTTGTTCTTTTCCCTCAGAGCCTTACAGACAAAG
 TGCCTGGGACAGACCCCCACCATCCTCCTGCTGCCCTGGGCTGAGCTTGTCTCCATGTGGGTGGGAGGGCTGCTG
 GGCTGTGAGATCCCTGTAGGTGAGAAATCCAACCTGATGCTTTCCCCCACTCTCCCATATCCTAATCACTCTGTC
 AATTCCCTTCCCAGGCGCTGGGTGTCTACAATGTACAGCAAGACAGCGCTGCTGGGTCTCACTAGAACACTGGCAT
 TGGAGCTGGCCCCCAAGGACATCCGGGTAAACTGCGTGGTTCCAGGAATTATCAAACTGACTTCAGCAAAGTGG
 TGAGGATTGGGTGTGTCTTCCATCTCCCAGTCTGGCTCAGTGGGAACCCTTCCCAGTGAATAAGGGATCAAGGGG
 TGACTGAATCCTTAGGTGAGCATGCCTATGACTGAGGTCCCTCATTGTTCTCTGAACTCAGCCATGGTGCAGTCCA
 TCCATCCTGAAAAGATGCTCCTTCTTTTGAGAAGGGCAAAGCTGCCCTAGGTGTTCTGCCTGGTGGCCTTCCCGG
 GGCCCTGCCCATCTTGTTTTAGTAGCACTGACTCCTTCATTTCTTCCCTTTGCCAGTTTCATGGGAATGAGTCT
 CTCTGGAAGAACTTCAAGGAACATCATCAGCTGCAGAGGCAAGTGGGGTTTGAGATTGGTGGTCCATGTGTGG
 CTAGGCAGGGGCAGTTGAGTCTATTGCAAGAGCAGACCCCTCCCTGTCATCTGGCCATTGTTTTGCTGAAATCT
 GGAGTCCACATGGCCCTGGAGGGTGCAAGTAGCCCTGCTGCATCCACCTTGTTCCCCATGGAGCCCACTCCCACC
 TGTCTATCCGTGAGCCCCAGAGCAGCAGAATCAGAGTACAAGATGCTTGACACTGTGTCCTTCTTCCATCCAGGAT
 TGGGGAGTCAGAGGACTGTGCAGGAATCGTGTCTTCCCTGTGCTCTCCAGATGCCAGCTACGTCAACGGGGAGAA
 CATTGCGGTGGCAGGCTACTCCACTCGGCTCTGAGAGGAGTGGGGGCGGCTGCGTAGCTGTGGTCCCAGGCCCAG
 GAGCCTGAGGGGGTGTCTAGGTGATCATTGGATCTGGAGGCAGAGTCTGCCATTCTGCCAGACTAGCAATTTGG
 GGGCTTACTCATGCTAGGCTTGAGGAAGAAGAAAAACGTTTCGGCATTCTCCTTAGGACTTATCTGCTTGTAGAT
 TTGGCTGATCCAATTAACATGTGGGGTTCTTGGTGTGGGTCTGGGGAGCTGAAGGATTTTATGGAGCTGGTGCTT
 TGGAGGAATCTTAAGGGAAAGGAGTAGAAGCTCAGGCCTTTGAAGGATTTAGCTCCTCCTCTCTGTAATTTGTG
 CTTTAAGCATTTTTTTTCCATAAAATAAACTCAAATTTATCCTC

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FIGURE 3967

GGTTCCCTTCCACGCTGTGGAAGCTTTGTTCTTTTGGTCTTCATGATAAATCTTGCTGCTGCTCACTCGTTGGGT
CCGTGCCACCTTTAAGAGCTGTAACACTCACCGCGAAGGTCTGCAACTTCACTCCTGGGGCCAGCAAGACCACGA
ATGCACCGAGAGGAATGAACAACCTCTGGACACACCATCTTTAAGAACCGTAATACTCACCGCAAGGGTCTGCAAC
TTCATTCTTGAAGTCAGTGAGGCCAAGAACCCATCAATTCCGTACACATTTTGGTGACTTTGAAGAGACTGTCAC
CTATCACCAAGTGGTGAGACTATTGCCAAGCAGTGAGACTATTGCCAAGTGGTGAGACCATCACCAAGCGGTGAG
ACTATCACCTATCGCCAAGTGGCCTGATTGAGCAGGAAGCATCTCAGACACCAACCACTATGCTGTCAGCAGTTG
CCCGGGGCTACCAGGGCTGGTTTTCATCCCTGTGCTAGGCTTTCTGTGAGGATGAGCAGCACCGGGATAGACAGGA
AGGGCGTCTCTGGCTAACCAGGTAGCCGTGGTCACGGGGTCCACCAGTGGGATCGGCTTTGCCATCGCCCGACGTC
TGGCCCGGGACGGGGCCACGTGGTCATCAGCAGCCGGAAGCAGCAGAACGTGGACCGGGCCATGGCCAAGCTGC
AGGGGGAGGGGCTGAGTGTGGCGGGCATTGTGTGCCACGTGGGGAAGGCTGAGGACCGGGAGCAGCTGGTGGCCA
AGGCCCTGGAGCACTGTGGGGGCGTCGACTTCCTGGTGTGCAGCGCAGGGGTCAACCCCTCTGGTAGGGAGCACTC
TGGGGACCAAGTGAGCAGATCTGGGACAAGATCCTAAGTGTGAACGTGAAGTCCCCAGCCCTGCTGCTGAGCCAGT
TGCTGCCCTACATGGAGAACAGGAGGGGTGCTGTGTCATCCTGGTCTCTTCCATTGCAGCTTATAATCCAGTAGTGG
CGCTGGGTGTCTACAATGTGAGCAAGACAGCGCTGCTGGGTCTCACTAGAACACTGGCATTGGAGCTGGCCCCCA
AGGACATCCGGGTAAACTGCGTGGTTCCAGGAATTATCAAACTGACTTCAGCAAAGTGTTTCATGGGAATGAGT
CTCTCTGGAAGAACTTCAAGGAACATCATCAGCTGCAGAGGATTGGGGAGTCAGAGGACTGTGCAGGAATCGTGT
CCTTCTGTGCTCTCCAGATGCCAGCTACGTCAACGGGGAGAACATTGCGGTGGCAGGCTACTCCACTCGGCTCT
GAGAGGAGTGGGGGCGGCTGCGTAGCTGTGGTCCCAGGCCAGGAGCCTGAGGGGGTGTCTAGGTGATCATTGG
ATCTGGAGGCAGAGTCTGCCATTCTGCCAGACTAGCAATTTGGGGGCTTACTCATGCTAGGCTTGAGGAAGAAGA
AAAACGCTTCGGCATTCTCC

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FIGURE 3968

TCTTGTGCCCCGGGGCCGGTGGGGAGGCCGGGGAGGGGGCCCCGGGGGGCGCAGGGGACTACGGGAACGGCCTGGA
GTCTGAGGAAGTGGAGCCTGAGGAGCTGCTGCTGGAGCCCCGAGCCGGAGCCCCGAGCCCGAAGAGGAGCCGCCCCG
GCCCCGCGCCCCCCCCGGGAGCTCCGGGCCCTGGGCCCTGGTTCGGGAGCCCCCGGCAGCCAAGAGGAGGAGGAGGA
GCCGGGACTGGTCGAGGGTGACCCGGGGGACGGCGCCATTGAGGACCCGGTGAGGGAAGGAGGGCGAGCGAGCAG
GCCGGCGGCTGGCCGGCCGGGTCACTGGAGGCCAGAGCTCGGGCGAGCGGGTGGCAGGCGGGGGGTGGGGTTGG
GCGGGGAATAACGTGGCTGGGGCCGGGTCTGGGCCGGGGATGGGTGAGCGATCACTACAAGGGGGCCCGACTGGCTT
GATTCGGGCGTCACGGTTGCCTAGTGTGTTCTAGAGAGGGTAGCTTTTCTTTTATCACGACCCCTCGCATGGGGC
GAGGGAATGGCCGAGCATGGCTGAGGCCGCGCTCTGGCCGAGAGCAGGGGCACAGCCCCCTGCGTTGGTTCCTCTT
AAGCTGTCCTCCATACCCTCCCCACTTATATTAGGAGCTGGAAGCTATCAAAGCTCGAGTCAGGGAGATGGAGGA
AGAAGCTGAGAAGCTAAAGGAGCTACAGAACGAGGTAGAGAAGCAGATGAATATGAGTCCACCTCCAGGCAATGC
TGGCCCGGTGATCATGTCCATTGAGGAGAAGATGGAGGCTGATGCCCGTTCCATCTATGTTGGCAATGTGGACTA
TGGTGCAACAGCAGAAGAGCTGGAAGCTCACTTTCATGGCTGTGGTTCAGTCAACCGTGTTACCATACTGTGTGA
CAAATTTAGTGGCCATCCCAAAGGGTTTTCGTATATAGAGTTCTCAGACAAAGAGTCAGTGAGGACTTCCTTGGC
CTTAGATGAGTCCCTATTTAGAGGAAGGCAAATCAAGGTGATCCCAAAACGAACCAACAGACCAGGCATCAGCAC
AACAGACCGGGGTTTTCCACGAGCCCGCTACCGCGCCCGGACCACCAACTACAACAGCTCCCGCTCTCGATTCTA
CAGTGGTTTTTAACAGCAGGCCCCGGGGTCGCGTCTACAGGTCAGGATAGATGGGCTGCTCCTCTTTCCCCCGCCT
CCCGTG

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FIGURE 3969A

CACGCTCAGAGCAGACCGCTAGCAGGAGGCAGGATGTGATAGTCTAAGACCCTGGAAGCTGACGGCCAGAGGGAG
 GGAAGGGTGGTCACAGAGGAGAGGGCAAAGCAACGGGAGGTGGAGGATCCTGGAGGTGTCTGCAAGGAGAATACAC
 AGCAGCGAGGGGCTGCAGAAGCGGACCCAGCGACTTCTGCGCTGACGCGGGGCGGGCGGGAGAGAGGAAGAGAGG
 GGAGCGCGGTGGCGCTGCGAGCTGGCCCCGCGGGGAAGGGGCTGCCATGTCCTGAGCGGCCCCGGGCACCG
 ACATTCCCCGCAACCTGAGCTTCATCGCCGCGCTAACGGAGCGCGCCTACTACCGTAGCCAGCGGCCCCAGCCTCG
 AGGAGGAGCCGGAGGAGGAGCCAGGCGAGGGCGGGACGCGGTTCTGGGGCCCGATCCCGCGCTCACGCACCGAGTC
 GGGGCCGCGGGGCGGATCTGCACACGCGGAGGCGGGCGGGGCCCGGGCGCCCCGAGCCGTAGCCCAGACACCC
 GCAAGAGAGTGCCTTTCCGCGACGCACTGGGGTTGGAGCTGGCTGTCTGCGCCGCTTCCGTCCCGGTGAGCTGC
 CCCGGGTGCCCCGCCACGTGCAGATCCAATTGCAGAGGGACGCCCTCCGCCACTTCGCGCCCTGCCAGCCCCGCG
 CCCGCGGCTCCAGGAGGCGCGCGCCGCGCCCTGGAGCCGGCCAGCGAGCCCGGCTTCGCGCGCCGCTTGCTGACGC
 AGCGCATCTGCCTGGAACGCGCGCGAGGCGGGCCCGCTGGGCGTGGCCGGGAGCGCGCGCGTGGTGGACCTGGCCT
 ACGAGAAGCGCGTGAGCGTGCGCTGGAGCGCCGACGGCTGGCGGAGCCAACGCGAGGCGCCAGCCGCTACGCCG
 GTCCGGCCCCGCCCCGCGCGCGCCGACCGCTTCGCTTCCGCTGCCCCGCGCGCCGATTGGGGGCGCCCTGC
 TCTTCGCTTTGCGCTACCGTGTGACAGGTACAGAGTTCTGGGACAACAACGGCGGCCGTGACTATGCTCTACGTG
 GGCCCCGAGCACCCGGGCGAGTGGCGGAGCTCCGGAGCCGACGGCTGGATCCACTTTATCTGAGACGAGGCGCCTG
 CGGCCGACGGCGGAAAACACCAAAGGCACCCGGGGCGGGGCGACCCGATGTGGCGGGGAGGAGTAGGAGAGACC
 AGGATTGGCGGGAGCGGTCCAAGGGAGTCAAGCCGGGGAGGGCGAAAAGGGAACCTGGCCACTGCTCCTTGCTCC
 TTGGCATTATGACGGGATTCCCTTGTCACCTCTGACAGTTCTGGCTGCGGTGTCCGCGGACTGGCTGGGGAGTG
 ATGACAGAAGGGATGGAAACCTATTTCTTTCTCCAAGACCATGGTTGGTCTGCTTCCCTCACTCGGGCTCCT
 TGACAGTCTTTAGAAAGAGAGAAGGAGGAAAAGAAGCAGTTCTTGATGTTACAAATGAACAAGGATCCACGCC
 TTAGTCTTTGAGAAAAGATGGCTGAAAGAGAGGAACCTCCAAGTCATTCCGCAACAACATGCCATTTAAACAT
 CATCCTTGCTTTGTGAAGAAAACAGGAAGAATGTATGTACCATGTGGATCACCTTCAGTTCAAAGTTGCAGCAA
 AGTGAAGAAAGAACTACTGGAAGCCACCCAGCAATGCAGTGTCTAGTCATCAATTAGGAGCCCATGGGAGGATA
 ATAGGGAGACTGGGTGGAGGCTCAGTGTGTAATAATCTCTGTCTAATGTATGTGTGTCAGTGCATGTTGTATG
 AACAATAGTGAGGGCTCACATTTACTTAACACTTGTGTGCGCAAAACCTGTAAGTAGAACATTGTATTATCTCT
 ACTCGATCATAAAATCTGTTTTGTTTGCATGCATGCCAAACACCTGTAAGTAGAACATTGTATTATCTCT
 GTTTTAGAGATGAGGAAACAGGCTCAGAGAAGCTCAGAAATTTGTTCAAGATCGCACAGCTAGTAAATGGCAGAA
 GTAGGATTGTGAACCCAGGGAATCTCCAGAGCCTCTGTGTAAACCATGATGTTATATTTTTTTCTCTTTAAAAA
 CAAAATTTAAACCTTGCTATAATCTCTTATTAGGAAATGATCATAGTTTCTGACTGTGCTCTGCCTTCCCATCC
 TGCCAATCTCCTGGACTGGCTTGGAAGACAGGGGGCCCCGAGCTTCATCTGTGACTCGAAGGAGTTTGCTGC
 TGTCTCCTGTGTGAGTGTCCCATGTATGCAGGATCAGCACAGGACCCCCCTCACCTTCCCACTTACACTCTAGCC
 TTTCCATACATTGGAATCTCTCCTGGCCCTAGCCAGCGCTCCACACCTGTTGGTGTGCCACCTCCCTCCCTCTT
 CCCCCACTGGCCTTGAACAGGCAAACCCCCCTAATGTGCGCACTAGGTTGGGTCCGTGACTAGGACACCTGCTAGA
 GGGTCTGTGCTTGGGCCCTTTCTAGGAATCCCGATGTTACTGGGTAAGTGCCAACCTCTGTGGGCAGAATGCTAAT
 GATAATCCTGTTCCCTGACCTCTTTCTCAGAAGTACCCTGGCTCACTCTCCCAATCTCAGCTTTATAGAACAAC
 ATTTTGGTCTTGATTATTTCCCATATCAAGCTGCCCCAGGGCTTCGGTAAGCTGTTAGTTGCCCCACTGCCTCAAG
 GCTGGGTCTGGCTGAGCTACTTCTTAGGCACACAAATAGTGGGTGTCTCCTTGGAACCTGACACAAAACATATCAG
 TGCTACCAAGCCTTGTAATAAGGGAGGAACTAATATTTCTTGAGTGGCTTCTGAGTGCCTGGTGTCTTCGCGG
 CTCTCTGGAGAGATTCTTGCCCTGATGGCTTTGGTGTGTACTCCTCTCCAGGACTTCAGCACTGAGATTTTCC
 CAACCCCCCTGGCTTTTCTCACCTTGGGTTGAGTTGATCCGGCACTACCACAAACCCACCATCTGCAAACCAAC
 CAAGATTAGGCAGTATGCCCTTTCCGTCTTGCACTGCTCTTCCAAACCTTCATCTGTATTTCTCACACCCTCAG
 TAAGCAAAGCTGAGTGTGCATGGACAGAGCTGCATCCACTGCTTTCTCCAGCGGGTGCAGTCTAATCTGACACG
 GGGAACTAGGAGTTTAGCGGAATCTTCAAGCAACCTATTAATGTGTTACGCATTAGGCATTGTAGTGGAACCT
 CCTCTGATGGCTCATGACTATATGAACAGGAGCAATTTGGAATATAACATGTGAGCTGTGGACTGGGAAGTGCCG
 TGAGAGAAAACACTACCTGGGTCATAGGCTTGGGTCCCTGAGGCAACCCAGCAGGGACACTGTTGCCCATTCCTC
 TCATCCAGACTGCAGGTGTCTTCTACACCTCCCTGTCCCATAGCCTCCGTCTGTTTTTTGTTTGTGTTTTT
 CTTTGTGAATGTAGAAAAACATTTTCATCATGAGCCCTAGCTCCTCAGTTTTCCACCTAACACCCACATTCCCTTG
 TTTCTAACTGCCGTGTTTTTCTGGAGCCTGCTGGGATCTTGCAGTTTGAGGTCATAGAATCAGACATGAAAAG

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FIGURE 3969B

GCTTCTCTTCCGACGTCATTGGTTCCCTGGCTCCTTTACAGATGAGAACACAGGTCCAGAGGTGAGAAATGACTCT
AGCAGGGTCATAGAATTTGTTAGTGCAGCTCAAGATGGGACTTAAACTCAGGCCTCCTGATCACCCATTCCCAGG
CTAGGAAACAGGTCTCTGCTCGGTGTGGTGGTTTCATACCTGTAATCGCAACACTTTGGGAGGCTGAGGCAGGAGC
ATTGCTTGAGCCCAGGAGTTTCGAGACCAGTCTGAGCAACATAGTGGGACCCTGTCTCTACAAAAACTTTTAAAAAT
TAGCTGGGCATGGTGGCACACATCTGTATTCCCAGCTACTCAGGAAGCTGAGACAGGAGGATCGCTTGAGCCCAG
GAGTTGGAGGTTACTGAGCTATGATCGCACCACTGCCTCCAGCTTGGTGACAGTGAGACCCTCAAAAAAAAAAAAA
GAAAAGAAAGAGGTCTCTACACAAGCCCGTGATTCTTCATGGCAAGGGATAACATCAGAAATGTTTCATTTTCTG
CTATTAGTTTCCATTCTTTCCCCATCCAGGCATAAAGAGAAACAAAAGACAATGATGGTATTCTCTGTGTCTCTC
AGCTTTGGCACTTTTGTGATGTTGCTAAGGAGCAGTGACCTTGCTAAAAAGACTGAATAATCCACCCACTGAAT
AGCTAACCTGGGGAGGAAATGAAAATTTCTTTGTGGATCTCCCCAAATCCATTGTTGTACCCAGGCCCTCCCAG
AACCTCCTCAGTTCCTTTCACAGTGCAACCCTGTGTACTTGGCCCGCAACCCAATAGTATTGTGCCTCACTTCACC
TTCCATGGGCAACTGCCCTCCCTTCTGGACATAAAACCTCATATTTTAAATAAAAGTTGAAATATGAAAAG

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FIGURE 3970

MSRERPPGTDIPRNLSFIAALTERAYYRSQRPSLEEEPEEEPEGEGGTRFGARSRAHAPSRGRRARSAPAGGGGAR
APRSRSPDTRKRVRFADALGLELAVVRRFRPGELPRVPRHVQIQLQRDALRHFAPCQPRARGLQEARAALEPASE
PGFAARLLTQRICLERAEAGPLGVAGSARVVDLAYEKRVSVRWSADGWRSQREAPAAAYAGPAPPPPRADRFARL
PAPPIGGALLFALRYRVTGHEFWDNNGGRDYALRGPEHPGSGGAPEPQGWIHFI

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FIGURE 3971

GGCTCCTTCCCCTTCCCGGGCCTTTTCAGCTTGGTCTTTCCGGGCCTCGCTTCCCCCAGCCCCTGCGCCCGGCCCG
AACGAGAGGTTCCGGAGCCCCGGCGCGGGCGGGTTCTGGGGTGTAGACGCTGCTGGCCAGCCCTCCCCAGCCGAG
GTTCTCGGCACCGCCTTGAGAGCTTCAGCTGCCCCAGGATTAGAATCCCAAGAAAATCAAATGGCATCCGGGGAT
TTCTGCTCACCTGGAGAAGGGATGAAATACTTCAACAAGTGTGCAGCAAACAACCTTCCTCCTTGTAACCTGAGT
AAAGAGGACCTGTTACAGAACCCATACTTCAGCAAGCTTCTCCTGAATCTCTCACAGCATGTGGATGAGAGTGGC
TTAAGCCTCACCTAGCAAAGGAGCAGGCTCAGGCATGGAAGGAAGTTCGACTGCATAAGACAACATGGTTGAGG
TCTGAGATTTTACACAGAGTCATTCAAGAGTTGCTTGTGGACTACTATGTGAAGATACAAGACACAAATGTAAC
TCTGAGGACAAAAAGTTTCATGAGACCCTTGAACAGCGGCTGCTTGTAACCTGAATGATGCGGCTCTTAGGTCTCT
AGCCAGGAGAGGGAGATACCTCCACTGCTGGGGCTGGAGAAAGCGGACCTTCTGGAACCTCATGCCACTCACAGAG
GATTTTGTGTGGATGAGGGCTCGGCTACAGCAAGAAGTAGAGGAGCAGCTCAAAAAGAAATGTTTCACTCTGCTC
TGCTACTATGATCCCAATTCAGATGCTGACAGTGAAACCGTGAAGGCAGCAAAGGTGTGGAAACTCGCAGAGGTC
CTGGTGGGTGAGCAGCAGCAGTGCCAGGATGCCAAGAGCCAGCAGAAGGAGCAGATGTTGCTGCTGGAGAAGAAG
AGTGCTGCTTACTCCCAGGTGCTTCTCCGCTGCCTCACTTTGCTGCAGAGGCTTCTTCAAGAACACCGGCTGAAG
ACTCAATCCGAGCTAGACCGCATCAATGCCAGTACCTGGAAGTCAAGTGCGGTGCTATGATCCTTAAGCTGAGG
ATGGAGGAGCTAAAGATTTTGTCCGACACTTACACTGTTGAGAAAAGTGGAAGTTCATCGTCTGATTAGGGACCGT
TTGGAGGGAGCCATTACCTACAGGAGCAGGACATGGAGAACTCAAGACAGGTCCTGAACTCCTATGAGGTCTCT
GGGGAGGAGTTTGACAGGCTGGTGAAGAGTACACCGTACTCAAGCAGGCAACAGAGAAACAAGCGGTGGGCCCTC
CAGGAGTTCAGCAAGGTCTACCGTTGAGCTCTGGCAGGGCCAGGAGACATGGCTTCTGCATAGCTGCTGCCTCCT
AATCTTCCTGCTAGTGGGACCACCTTACCTGGGGCTGCCTTCAGTGCAAGGGAGTGTGGAAATGCTTACGCTTG
AAACACTGCAGTCATTTAGGCACTCTCCTGGTTTCTCTTTATTTTTATGACTGGGCCTCTTCTGGAAAATCTAG
CAAGGAGATTTATATAATTTTTATGCATAGCTGTGTGTCAGTGTGAGCCCTGTATTGTATTTGATTATCTCCTGA
ATAAAGTTATGATATTATATCTTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3972

MASGDFCSPGEGMEILQQVCSKQLPPCNLSKEDLLQNPYFSKLLLNLQSHVDESGLSLTLAKEQAQAWKEVRLHK
TTWLRSEILHRVIEQLLDYVYKIQDTNVTSEDKKFHETLEQRLVTELMRLLGPSQEREIPPLLGLEKADLLEL
MPLTEDFVWMRRLQQEVEEQQLKKKCFLLCYDPNSDADSETVKAQVWKLAEVLVGEQQQCQDAKSQQKEQML
LLEKKSAAYSQVLLRCLTLLQRLLEHRLKTQSELDRIQAQYLEVKCGAMILKLRMEELKILSDTYTVEKVEVHR
LIRDRLEGAIHLQEQQDMENSRQVLNSYEVLGEEFDRLVKEYTVLKQATENKRWALQEFSKVYR

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FIGURE 3973

GC GACTCGTCCCGCCTTCTGGGGCACTAGTTT GACTTTGTGATTGGCTACTAGTATCAAGGAATCCCGGCGTGGA
CAGCGCGAGGAGAAAGATGGCGGCGATGGCGGTGCGGGGTGCTGGTGGGAGCCGCGTGTCAGCGGGAGGGACCT
GAATTGCGTCCCCGAAATAGCTGACACACTAGGGGCTGTGGCCAAGCAGGGGTTTGATTTCCTCTGCATGCCTGT
CTTCCATCCGCGTTTCAAGAGGGAGTTTCAATCAGGAACCTGCTAAGAAATCGGCCCGGTCCCCAGACACGATCAGA
CCTACTGCTGTGAGGAAGGACTGGAATACGCTAATTGTGGGAAAGCTTTCTCCATGGATTTCGTCCAGACTCAAA
AGTGGAGAAGATTTCGAGGAACCTCCGAGGCGGCCATGTTACAGGAGCTGAATTTTGGTGCATATTTGGGTCTTCC
AGCTTTTCTGCTGCCCCCTTAATCAGGAAGATAACACCAACCTGGCCAGAGTTTTGACCAACCACATCCCACTGG
CCATCACTCTTCCATGTTCTGGATGCGGGTACCCTTGGTGGCACCAGAGGACCTGAGAGATGATATAATTGAGAA
TGCACCAACTACACACACAGAGGAGTACAGTGGGGAGGAGAAAACGTGGATGTGGTGGCACAACCTCCGGACTTT
GTGTGACTATAGTAAGAGGATTGCAGTGGCTCTTGAAATTGGGGCTGACCTCCCATCTAATCATGTGATTGATCG
CTGGCTTGGGGAGCCCATCAAAGCAGCCATTCTCCCCACTAGCATTTCCTGACCAATAAGAAGGGATTTCCTGT
TCTTTCTAAGATGCACCAGAGGCTCATCTTCCGGCTCCTCAAGTTGGAGGTGCAGTTCATCATCAGGCACCAA
CCACCACTCAGAGAAGGAGTTCTGCTCCTACCTCCAATACCTGGAATACTTAAGCCAGAACCCTCCTCCACCTAA
TGCCTATGAACCTTTTGCCAAGGGCTATGAAGACTATCTGCAGTCCCCGCTTCAGCCACTGATGGACAATCTGGA
ATCTCAGACATATGAAGTGTGAAAAGGACCCCATCAAATACTCTCAGTACCAGCAGGCCATCTATAAATGTCT
GCTAGACCGAGTACCAGAAGAGGAGAAGGATACCAATGTCCAGGTACTGATGGTGTGTTGGGAGCAGGACGGGGACC
CCTGGTGAACGCTTCCCTGCGGGCAGCCAAGCAGGCCGACCGGCGGATAAAGCTGTATGCTGTGGAGAAAAACCC
AAATGCCGTGGTGAAGCTAGAGAACTGGCAGTTTGAAGAATGGGGAAGCCAAGTGACCGTAGTCTCATCAGACAT
GAGGGAATGGGTGGCTCCAGAGAAAGCAGACATCATTGTCAGTGAGCTTCTGGGCTCATTGCTGACAATGAATT
GTCGCTGAGTGCCTGGATGGAGCCAGCACTTCCTAAAAGATGATGGTGTGAGCATCCCCGGGGAGTACACTTC
CTTTCTGGCTCCCATCTCTTCCCAAGCTGTACAATGAGGTCCGAGCCTGTAGGGAGAAGGACCGTGACCCTGA
GGCCAGTTTGAGATGCCTTATGTGGTACGGCTGCACAACTTCCACCAGCTCTCTGCACCCAGCCCTGTTTCAC
CTTCAGCCATCCCAACAGAGATCCTATGATTGACAACAACCGCTATTGCACCTTGGAATTTCTGTGGAGGTGAA
CACAGTACTACATGGCTTTGCGGCTACTTTGAGACTGTGCTTTATCAGGACATCACTCTGAGTATCCGTCCAGA
GACTCACTCTCCTGGGATGTTCTCATGGTTTTCCATCCTCTTCCCTATTAAGCAGCCCATAACGGTACGTGAAGG
CCAAACCATCTGTGTGCGTTTCTGGCGATGCAGCAATTCCAAGAAGGTGTGGTATGAGTGGGCTGTGACAGCACC
AGTCTGTTCTGCTATTATATAACCCACAGGCCGCTCATATACCATTGGCCTCTAGCCCTGCGTGCCAAGTGTCCA
GAGCCTTGGAAGCAGCTTCAGGTTCTGCTCCTGTAGTACAGAAGGTGCAGTACATCTATGGGCTGTGATTCCCC
CTTGCCCATCAGAGAGGAGCATTTCATCTGCTTTCTGCCTTACATCAAGGTGGGCAAGGGATTATAATTAATT
GCAGGGCTCAAGCCACCAATCTATGAAGACCTCAGGCCAGGGGTGAGGAATTAGTGCTGGATTGGAAGCTACGC
ACTCAGCCTCAAGAACTCCCTGGAATATCCCTGAGAACATGGGGTTTGAACGGATTTTCAGCCTTTTTCTGTTCT
TGTTTTGATGGTTTTGTGTAAGAGGAAATACCAATAAAGTTATAGCCCTTTACTGCCAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

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FIGURE 3974

MAAMAVGGAGGSRVSSGRDLNLCVPEIADTLGAVAKQGDFLCMPVFHPRFKREFIQEPAKNRPGPQTRSDLLLSG
 RDWNTLIVGKLSPWIRPDSKVEKIRRNSEAAMLQELNFGAYLGLPAFLLPLNQEDNTNLARVLTNHIHTGHHSSM
 FWMRVPLVAPEDLRDDIIENAPTTHTEEYSGEEKTWMWWHNFRTLCDYSKRIAVALEIGADLPSNHVIDRWLGEP
 IKAAILPTSIFLTNKKGFPVLSKMHQRLIFRLLKLEVQFIITGTNHHSEKEFCSYLQYLEYLSQNRPPPNAYELF
 AKGYEDYLQSPQLQPLMDNLESQTYEVFEKDPIKYSQYQQAIYKCLLDREVPEEEKDTNVQVLMVLGAGRGPLVNAS
 LRAAQADRRIKLYAVEKNPNNAVVTLENWQFEWGSQVTVVSSDMREWVAPEKADIIIVSELLGSFADNELSPECI
 DGAQHFLKDDGVSIPGEYTSFLAPISSSKLYNEVRACREKDRDPEAQFEMPYVRLHNFHQLSAPQPCFTFSHPN
 RDP MIDNNRYCTLEFPVEVNTVLHGFAFYFETVLYQDITLSIRPETHSPGMFSWFPILFPKQPITVREGQTICV
 RFWRCSNSKKVWYEWAVTAPVCSAIHNPTGRSYTIGL

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FIGURE 3975

GGTTCTGGAAGACGGCAGAGCTGCCGCCATTTTTCGGGGAAGAGGAGGCTCTGTACCTGCAGTGCTGCTTTTCTTG
CCTAGACTCTAGGAACATATCCGAGCTCCACTCCCCACAACATACTCAAAGGAACGGAGAGAACCGGGACCCCCCT
GCGGGGACCCGGAAGTATCTGACAGGATGGCATCTGATGACTTTGACATAGTGATTGAGGCCATGCTGGAAGCT
CCCTATAAAAAAGAAGAGGATGAGCAACAAAGGAAAGAAGTTAAAAAGGATTATCCTAGCAATACCACCAGCAGC
ACCAGCAACAGTGGCAATGAGACCAGTGGGAAGCAGCACCATCGGGGAGACAAGCAATCGTAGTCGAGATCGGGAT
CGGTATAGACGGAGAAATAGTCGGAGCCGAAGTCCAGGTCGGCAGTGTCTGTCACCGTAGCCGTAGCTGGGATCGT
CGACATGGTAGTGAGTCGCGAAGTCGGGACCATCGTCTGTGAGGATCGTGTGCATTACAGGAGTCCTCCACTTGCC
ACTGGTTATAGGTATGGACACAGTAAGAGTCCTCATTTTCAGAGAGAAGAGCCCAGTCAGGGAGCCAGTTGATAAT
CTGAGTCCTGAGGAGCGTGATGCCCACAGTCTTCTGTATGCAGTTAGCTGCCCGAATTCGGCCTCGAGATCTG
GAGGACTTTTTCTCTGCTGTAGGCAAGGTTTCGCGATGTACGTATCATCTCAGATCGGAACCTCACGTCGTTCTAAG
GGCATTGCCTACGTGGAATTTCTGTGAAATCCAGTCTGTGCCACTGGCCATTGGGCTGACTGGGCAGCGGTTGCTG
GGAGTGCCTATCATTGTACAGGCTTCACAGGCAGAGAAAAACCGACTGGCAGCCATGGCCAAACAACCTGCAAAAG
GGCAATGGTGGACCAATGCGCCTCTATGTGGGTTCCCTGCACCTCAATATCACTGAAGACATGCTCCGGGGCATC
TTTGAGCCCTTTGGTAAATTTGATAATATTGTCTGTATGAAGGACTCAGATACAGGCCGCTCTAAAGGTTATGGT
TTCATCACGTTCTCTGATTCTGAGTGTGCCGGCGGGCCCTGGAACAGTTGAATGGGTTTGAGCTTGCTGGTTCGA
CCTATGAGGGTTGGCCATGTGACTGAGCGACTGGATGGTGGCACAGACATCACTTTTCTGATGGGGACCAGGAG
CTGGATCTGGGATCAGCAGGTGGACGTTTTTCAGCTCATGGCAAACTGGCAGAAGGCGCTGGAATCCAAC TGCCA
AGCACTGCTGCTGCTGCTGCTGCCGCCGCCGCCAGGCTGCTGCCTTGCAACTGAATGGAGCAGTTCCCTTGGGG
GCCCTGAATCCAGCAGCTCTGACTGCTCTGAGTCCAGCCCTGAACCTTGCCCTCCAGTGTTTCCAGCTCTCCAGC
CTCTTTACCCCCCAGACCATGTAAATCAGTGGCACAGTATACTGCCTCCTTGTCCTCTGGATCCTGCCACTTCA
CATCTACTCTTCCATGGCCCCATTTCTCCATTTTGTGGACCAAGCCATCCTGAGGGCATGGACATTGTCTCTGAG
GAAATTGGGGCCACCCTTAAGATACCAAGAAAAGCTCCTGCCCATGGTCCCCTGGAATGGACTCTGCTGAGCA
AAGCCACCAGTTGAAGAGAACAGAATCCACACCTGCATTGAATACCTGTTTCTCCATGTGTATCGTCTCTGAGAT
TACCTTCTTGCCCTTTCCAACACCTTAGTGATTCTCAATTTCTCCCCCATTGGGAAGGCCATAGGGCATACTGA
AGGAACTGACCTCTCTCCTTTTCTGTACCTTTAACCTTTAGTCTGTCAAGGAAAACCTTAGGACCTCTGAATC
AAGAGGACTGAGTTTGTGGGTGAACCTTGAAGGTGCTCTTTCTGCTACAAGGGCCCTGGGAGATAGCATGGACGT
GCATTGAGAAGCCAGCCTCAGACCTTAGCTTGAAGCAGCTTGAGGCCAGACCTACTGTAGCCTCAGCATCTGCT
AGGAGGCATGGAAGTGATCTATCCTGCCAGGAGGCCTCAGAGTGATCTGTCTGCCAGGAGGTGTGAGAGTGATC
TGTCCTGTGAGGCATTTAGGGGCTTTT CAGGAATTTAGTAAAAGGTGGAGTATGCCCTTTCCAGTATCTTCCATCTT
CCTTTGTATACTTGTCTCTTCTCCATTTCTCCCTTTGGCCCCGAGGTAGGAGGATGGAGGGAGGCTGCTACTCT
ACCACTTCTGTGTGCCTCTACTGTGGCCTCAACCCTGGCAATTATAGCTACTCCCATCCCTTACCTGGGCATGT
GTGAGCCCTTCTCACTGGATTTTATACCCTTGTGTCTGTGTACATAAATATATATACATATATATACATAAAAA
ACTTTGTAC

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FIGURE 3976

CAGACCCAGTTTCGCCGACTAAGCAGAAGAAAGATCAAAAACCGGAAAAGAGGAGAAGAGCAAACAGGCACTTTG
 AGGAACAATCCCTTTTAACCTCAAGCCGACAGCGGTCTAGGAATTCAGTTTCAGTGCCCTACCGAAGACAAAGGCG
 CCCCAGGGAGTGCGGTGCGACCCAGGGCGTGGGCCCGGCCGCGGAGCCACACTGCCCGGTGACCCGGTG
 TCTCGGACCATGTTCTCCGCCCCAAGACCCCCCGTTGTCTCCTGCTCCCCCTGCTCACGCTCGGCACCGCGCTC
 GCCTCCCTCGGCTCGGCCCAAAGCAGCAGCTTCAGCCCCGAAGCCTGGCTACAGCAATATGGCTACCTGCCTCCC
 GGGGACCTACGTACCCACACACAGCGCTCACCCAGTCACTCTCAGCGGCCATCGCTGCCATGCAGAAGTTTTAC
 GGCTTGCAAGTAACAGGCAAAGCTGATGCAGACACCATGAAGGCCATGAGGCGCCCCCGATGTGGTGTTCAGAC
 AAGTTTGGGGCTGAGATCAAGGCCAATGTTTGAAGGAAGCGCTACGCCATCCAGGGTCTCAAATGGCAACATAAT
 GAAATCACTTTCTGCATCCAGAATTACACCCCAAGGTGGGCGAGTATGCCACATACGAGGCCATTGCGAAGGCG
 TTCCGCGTGTGGGAGAGTGCCACACCACTGCGCTTCCGCGAGGTGCCCTATGCCCTACATCCGTGAGGGCCATGAG
 AAGCAGGCCGACATCATGATCTTCTTTGCCGAGGGCTTCCATGGCGACAGCACGCCCTTCGATGGTGAGGGCGGC
 TTCTTGGCCCATGCCTACTTCCCAGGCCCAACATTGGAGGAGACACCCACTTTGACTCTGCCGAGCCTTGGACT
 GTCAGGAATGAGGATCTGAATGGAAATGACATCTTCTGTGGCTGTGCACGAGCTGGGCCATGCCCTGGGGCTC
 GAGCATTCCAGTGACCCCTCGGCCATCATGGCACCCCTTTTACCAGTGGATGGACACGGAGAATTTTGTGCTGCC
 GATGATGACCGCCGGGGCATCCAGCAACTTTATGGGGTGAGTCAGGGTTCCCCACCAAGATGCCCCCTCAACCC
 AGGACTACCTCCCGGCCTTCTGTTCCTGATAAACCCAAAACCCACCTATGGGCCAACATCTGTGACGGGAAC
 TTTGACACCGTGCCATGCTCCGAGGGGAGATGTTTGTCTTCAAGGAGCGCTGGTTCTGGCGGTGAGGAATAAC
 CAAGTGATGGATGGATACCCAATGCCATTGGCCAGTTCTGGCGGGGCTGCTGCGTCCATCAACACTGCCTAC
 GAGAGGAAGGATGGCAAATTCGTCTTCTTCAAAGGAGACAAGCATTGGGTGTTTGATGAGGCGTCCCTGGAACCT
 GGCTACCCCAAGCACATTAAGGAGCTGGGCCGAGGGCTGCCACCGACAAGATTGATGCTGCTCTTCTTGATG
 CCCAATGGAAAGACCTACTTCTTCCGTGGAACAAGTACTACCGTTTCAACGAAGAGCTCAGGGCAGTGGATAGC
 GAGTACCCCAAGAACATCAAAGTCTGGGAAGGGATCCCTGAGTCTCCAGAGGGTCATTATGGGCACCGATGAA
 GTCTTCACTTACTTCTACAAGGGGAACAATACTGGAAATTCAACAACCAGAAGCTGAAGGTAGAACCGGGCTAC
 CCCAAGTCAGCCCTGAGGGACTGGATGGGCTGCCATCGGGAGGCCGGCCGATGAGGGGACTGAGGAGGAGACG
 GAGGTGATCATCATTGAGGTGGACGAGGAGGGCGGGCGGTGAGCGCGGCTGCCGTGGTGCTGCCCGTGCTG
 CTGCTGCTCCTGGTGCTGGCGGTGGGCTTGAGTCTTCTTTCAGACGCCATGGGACCCCAAGCGACTGCTC
 TACTGCCAGCGTTCCTGCTGGACAAGGTCTTGACCGCCACCGCGCCGCCCCTCCTACCACAAGGACTTTGC
 CTCTGAAGGCCAGTGGCAGCAGGTGGTGGTGGGTGCTGCCATCGTCCCGAGCCCCCTCCCCGAGCCTCC
 TTGCTTCTCTGTCCCCCTGGCTGGCTGCTTCCCTGACCCTGCCCTCCCTCCTGCCCCGGCATTGCATCTT
 CCCTAGATAGGTCCCCCTGAGGCTGAGTGGGAGGGCGGCCCTTTCCAGCCTCTGCCCTCAGGGGAACCCCTGTAG
 CTTTGTGTCTGTCCAGCCCATCTGAATGTGTTGGGGCTCTGCATTGAAGGCAGGACCCTCAGACCTCGCTGG
 TAAAGGTCAAATGGGGTCATCTGCTCCTTTTCCATCCCTGACATACCTTAACCTCTGAACCTGACCTCAGGAG
 GCTCTGGGCACTCCAGCCCTGAAAGCCCCAGGTGTACCCAATTGGCAGCCTCTCACTACTCTTTCTGGCTAAAAG
 GAATCTAATCTTGTGTGAGGGTAGAGACCTGAGACAGTGTGAGGGGTGGGGACTGCCAAGCCACCCTAAGACCT
 TGGGAGGAAAACCTCAGAGAGGGTCTTTCGTTGCTCAGTCAGTCAAGTTCCTCGGAGATCTGCCTCTGCCTCACCTA
 CCCCAGGGAACTTCCAAGGAAGGAGCCTGAGCCACTGGGGACTAAGTGGGCAGAAGAAACCCCTGGCAGCCCTGT
 GCCTCTCGAATGTTAGCCTTGGATGGGGCTTTTACAGTTAGAAGAGCTGAAACCAGGGGTGCAGCTGTGAGGTAG
 GGTGGGGCCGGTGGGAGAGGCCCGGGTCAGAGCCCTGGGGGTGAGCCTGAAGGCCACAGAGAAAGAACCTTGCCC
 AAACCTCAGGCAGCTGGGGCTGAGGCCCAAAGGCAGAACAGCCAGAGGGGGCAGGAGGGGACCAAAAAGGAAAATG
 AGGACGTGCAGCAGCATTGGAAGGCTGGGGCCGGGCAGGCCAGGCCAAGCCAAGCAGGGGGCCACAGGGTGGGCT
 GTGGAGCTCTCAGGAAGGGCCCTGAGGAAGGCACACTTGCTCCTGTTGGTCCCTGTCTTGTGCCAGGCAGCG
 TGGAGGGGAAGGTAGGGCAGCCAGAGAAAGGAGCAGAGAAGGCACACAAACGAGGAATGAGGGGCTTACAGAGA
 GGCCACAGGGCCTGGCTGGCCACGCTGTCCCGGCTGCTCACCATCTCAGTGAGGGGCAGGAGCTGGGGCTCGCT
 TAGGCTGGGTCCACGCTTCCCTGGTGCCAGCACCCCTCAAGCCTGTCTCACCAGTGGCCTGCCCTCTCGCTCCCC
 CACCCAGCCACCCATTGAAGTCTCCTTGGGCCACCAAGGTGGTGGCCATGGTACCGGGGACTTGGGAGAGTGA
 GACCCAGTGGAGGGAGCAAGAGGAGAGGGATGTCGGGGGGGTGGGGCACGGGGTAGGGGAAATGGGGTGAACGGT
 GCTGGCAGTTTCGGCTAGATTTCTGTCTTGTGTTTTTTGTTTTGTTTAAATGTATATTTTATTATAATTATTA
 TATATGAATTCCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3977

MSPAPRPPRCLLLPLLLTLGTALASLGSAQSSSFSPPEAWLQQYGYLPPGDLRTHQTQRSPQSLSAIAAMQKFYGLQ
VTGKADADTMKAMRRPRCGVPDKFGAEIKANVRKRYAIQGLKWQHNEITFCIQNYTPKVGEYATYEAIRKAFRV
WESATPLRFREVPYAYIREGHEKQADIMIFFAEGFHGDSTPFDGEGGFLAHAYFPGPNIGGDTHFDSAEPWTVRN
EDLNGNDIFLVAVHELGHALGLEHSSDPSAIMAPFYQWMDTENFVLPDDDRRGIIQQLYGGESGFPTKMPPQPRTT
SRPSVPDKPKNPTYGPNICDGNFDTVAMLRGEMFVKERWFWVRNNOVMGYPMPIGQFWRGLPASINTAYERK
DGKFVFFKGDKHVVFDEASLEPGYPKHIKELGRGLPTDKIDAALFWMPNGKTYFFRGNKYYRFNEELRAVDSEYP
KNIKVWEGIPESPRGSFMGSDEVFTYFYKGNKYWKFNNOKLKVEPGYPKSALRDWMGCPSSGGRPDDEGTEETEVI
IIEVDEEGGGAVSAAAVVLPVLLLLLVAVGLAVFFFRRHGTPRRLLYCQSLLDKV

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FIGURE 3978

TCCTGCTCAGCATGGCTGCTTTAGGGACTGTTCTTTCACAGGTGTCCGGAGGCTGCACTGCAGCGTAGCCGCTT
GGGCGGGCGGCCAGTGGCGACTACAGCAGGGACTGGCTGCCAACCCCTCCGGCTACGGGCCCCTTACCGAGCTCC
CAGACTGGTCATATGCGGATGGCCGCCCTGCTCCCCCAATGAAAGGCCAGCTTCGAAGAAAAGCTGAAAGGGAGA
CGTTTGCAAGACGAGTTGTACTGCTGTCACAGGAAATGGACGCTGGATTACAAGCATGGCAGCTCAGGCAGCAGA
AGTTGCAGGAAGAACAAGGAAGCAGGAAAATGCTCTTAAACCCAAAGGGGCTTCACTGAAGAGCCCACTTCCAA
GTCAATAAAAAGCAACTCCTGCCTCCCTTCCTCACCTGTCTCTGGATTCTTTTCTATCACCTAGATGCTTCAT
CCAGCCAGAAGATAGCCTTCACGTTCCCCATCTGTCTTCAGAGAAAAAGAGCTGGGACACCAAGAACAAGCTGTT
AGATCACTGCCTGGGAGGCTTGGCTTAGTACTCTCATCTCTGGTTCCATTCCAGTTCAGCTAAGTCTTGCTTTAA
AATTTTTACCTCCTAGCTGGGTGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAGAT
CACAAGATCAGGAGTTCGAGACCAGCCTGGCCAACCCAGCCTGGTCAACATGGTGAAACCCCTGTCCCTACTAAAG
ATACAAACAATTAGCCGGGCGTGGTGGGGTGCGCTTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCG
CTTAAACTCGGGAGGTAGAGGTTGCAGTGAGCCAAGGTCACACCAATTGCACTCCAACCTGGGCGACAGGGCGAGA
CTCCGTCTCAAAAAAAAAAAAAAAAAATTTACCTCCTTTGCAGGCCATAGGACTAGCCCAACTATGAGAAATAGCTGT
TCTGTGAACGTGAAAAGGGGACAGCAGTTTTCCAGTTTTGGCCAGGCAGTCAAGCCTTTAACAGCTCATGCACA
GTTTAGGCCATGTACAGCTGGCATCTAATAAATGTTTTCATGAAAAAGA

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FIGURE 3979

MAALGTVLFTGVRRLHCSVAWAGGQWRLQQGLAANPSGYGPLTELPDWSYADGRPAPPMKGQLRRKAERETFAR
RVVLLSQEMDAGLQAWQLRQQKLQEEQRKQENALKPKGASLKSPLPSQ

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FIGURE 3980

AGCTGTTGCAGCATGAGCGATACGCTTGGTTCTCCTAACTAGCACCTTCCCCTCTCCCCTGACTCAGCTGGTAGC
CCCTCCTCCCCGCACCTGCCCCAAAGGTCAGTGGACAGGCATTTGTCTGGCCTTCCCTTTTACTGCTGGCTGGGAA
GGAGGAGCATCAGACCACAGATCCTGGAAGGCATTCTCTCCCTGACTGCTGCTCACACTGCCGTGAGAACCTGC
TTATATCCAGGACCAAGGAGGCAATGCCAGGAAGCTGGTGAAGGGTTTCTCTCCTCCACCATGGTTGACAGCAC
TGAGTATGAAGTGGCCTCCCAGCCTGAGGTGGAAACCTCCCCTTTGGGTGATGGGGCCAGCCCAGGGCCGGAGCA
GGTGAAGCTGAAGAAGGAGATCTCACTGCTTAACGGCGTGTGCCTGATTGTGGGGAACATGATCGGCTCGGGCAT
CTTTGTTTCCCCCAAGGGTGTGCTCATATACAGTGCCTCCTTTGGTCTCTCTCTGGTCATCTGGGCTGTCTGGGGG
CCTCTTCTCCGTCTTTGGGGCCCTTTGTTATGCGGAAGTGGGCACCACCATTAAAGAAATCTGGGGCCAGCTATGC
CTATATCCTGGAGGCCTTTGGAGGATTCTTGTCTTTCATCAGACTCTGGACCTCCCTGCTCATCTATTGAGCCCAC
CAGCCAGGCCATCATTGCCATCACCTTTGCCAACTACATGGTACAGCCTCTCTTCCCGAGCTGCTTCGCCCTTA
TGCTGCCAGCCGCTGCTGGCTGCTGCCTGCATTTGTCTCTTAACCTTCATTAAGTGTGCCTATGTCAAATGGGG
AACCCTGGTACAAGATATTTTACCTATGCTAAAGTATTGGCACTGATCGCGGTATCGTTGCAGGCATTGTTAG
ACTTGGCCAGGGAGCCTCTACTCATTTTGAAGATTCTTTGAGGGTTTCATCATTGTCAGTGGGTGACATTGCCCT
GGCACTGTACTCAGCTCTGTTCTCTACTCAGGCTGGGACACCCTCAACTATGTCACTGAAGAGATCAAGAATCC
TGAGAGGAACCTGCCCCCTCTCCATTGGCATCTCCATGCCATTGTCCACCATCATCTATATCTTGACCAATGTGGC
CTATTATACTGTGCTAGACATGAGAGACATCTTGGCCAGTGATGCTGTTGCTGTGACTTTTGCAGATCAGATATT
TGGAATATTTAACTGGATAATTCCACTGTCTAGTTGCATTATCCTGTTTGGTGGCCTCAATGCCTCCATTGTGGC
TGCTTCTAGGCTTTTCTTTGTGGGCTCAAGAGAAGGCCATCTCCCTGATGCCATCTGCATGATCCATGTTGAGCG
GTTACACACAGTGCCTTCTCTGCTCTTCAATGGTATCATGGCATTGATCTACTTGTGCGTGGAAGACATCTTCCA
GCTCATTAATACTACTACAGCTTCAGCTACTGGTTCTTTGTGGGGCTTTCTATTGTGGGTGAGCTTTATCTGCGCTG
GAAGGAGCCTGATCGACCTCGTCCCCTCAAGCTCAGCGTTTTCTTCCCGATTGTCTTCTGCCTCTGCACCATCTT
CCTGGTGGCTGTTCCACTTTACAGTGATACTATCAACTCCCTCATCGGCATTGCCATTGCCCTCTCAGGCCTGCC
CTTTTACTTCTCATCATCAGAGTGCCAGAACATAAGCGACCGCTTACCTCCGAAGGATCGTGGGGTCTGCCAC
AAGGTACCTCCAGGTCTGTGTATGTCAGTTGCTGCAGAAATGGATTGGAAGATGGAGGAGAGATGCCCCAAGCA
ACGGGATCCCAAATCTAACTAAACACCATCTGGAATCCTGATGTGGAAGCAGGGGTTTCTGGTCTACTGGCTAG
AGCTAAGGAAGTTGAAAAGGAAAGCTCACTTCTTTGGAGGCACCTGTCCAGAAGCCTGGCCTAGGCAGCTTCAAC
CTTTGAACTTACTTTTGAAGTGAAGTAATTTATTTGTTTTGCTACATACTGTTCCAGACTTTTAAAGGGGAC
AATGAAGGTGACTGTGGGGAGGAGCATGTCTAGGTTGGGCTTGGTTGTTTTAGAAGCACCTGGGTGTGCCTACCT
ACTCCTCTTTTCTTTTAAAGGGCCACAATGCTCCAATTTCTGTCTCCTTTAGAGAGACATGAAACTATCACA
GGTGCTGGATGACAATAAAAGTTTATGTTCT

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FIGURE 3981

ATGGTAACGTGGCTTTACAGATTTTTACCCACTTCAAATATGGCCGCCAAGCTCCGTTCTCTTTTACCGCCTGAT
CTACGGCTACAATTCTGGCTTCATGCCCGCTCCAAAAGTGCTTCCTCTCGAGGGGTTGTGGTTCTTACTGCGCA
GGCGCAAAAGCAAGTCCTCTTCCGGGCAAAATGGCGATGGGACTAATGTGCGGACGCCGGGAGCTTCTGCGCTTG
CTACAGTCCGGGCGTCGGGTCCACAGCGTCGCAGGGCCCTCGCAATGGCTTGGGAAACCGCTGACCACACGGCTC
CTATTTCCAGTAGCCCCGTGCTGCTGTCGCCCACACTACCTCTTCCTTGCGGCTTCCGGCCCCCGCAGCCTCAGT
ACCTCTGCTATCTCTTTTGCAGAAGTCCAGGTTTCAGGCCCCCTCCTGTTGTGCTGCAACTCCCTCACCCACAGCA
GTACCTGAGGTGGCTTCTGGAGAGACTGCAGATGTAGTCCAAACTGCTGCAGAGCAGAGCTTCGCTGAACTGGGG
CTGGGGTCATACACCCCAAGTGGGACTGATCCAGAATTTACTGGAATTTATGCATGTTGATCTGGGCCTACCTTGG
TGGGGGGCCATTGCTGCATGTACAGTCTTTGCCCGCTGCCTGATTTTTCTCTCATCGTGACGGGCCAGCGAGAG
GCAGCCAGGATCCACAATCACTTGCCAGAGATCCAGAAGTTTTCCAGTCGAATCAGAGAGGCCAAGTTAGCAGGA
GACCATATTGAGTATTACAAGGCTTCCTCGGAGATGGCAGTTTACCAGAAAAACATGGTATTAACTCTATAAA
CCTCTCATTCTCCCTGTGACTCAGGCCCCAATCTTCATCTCCTTCTTCATTGCTTTGAGAGAGATGGCCAACCTT
CCTGTGCCAGCCTGCAGACAGGTGGCCTCTGGTGGTTCCAGGATCTCACGGTATCCGATCCCATCTACATATTA
CCACTGGCAGTCACTGCTACAATGTGGGCTGTTCTTGAGCTAGGTGCTGAGACAGGTGTGCAAAGTTCTGACCTT
CAGTGGATGAGAAATGTCATCAGAATGATGCCCCCTGATAACCTTGCCCATACCATGCATTTCCCCACGGCAGTG
TTTATGTACTGGCTCTCCTCCAATTTGTTTTCCCTGGTCCAAGTATCCTGTCTCCGGATTCCAGCAGTACGCACT
GTACTTAAAATCCCCCAGCGTGTGTACATGACCTGGACAAATTACCTCCACGGGAAGGCTTCCTAGAGAGCTTC
AAAAAAGGCTGGAAAAATGCTGAAATGACGCGTCAGCTGCGAGAGCGTGAACAACGCATGCGGAATCAGTTGGAG
CTAGCAGCCAGGGGTCTTTACGACAGACCTTTACCCACAACCCTCTCCTACAACCTGGAAAGGATAACCCCTCCC
AATATCCCTAGCAGCAGCAGCAAACCAAGTCAAAGTATCCCTGGCACGACACACTTGGCTGA

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FIGURE 3982

MVTWLYRFLPTS NMAAKLRSLPPDLRLQFWLHARLQKCFLSRGC GSYCAGAKASPLPGKMAMGLMCGRRELLRL
LQSGRRVH SVAGPSQWL GKPLTTRLLFPVAPCCCRPHYLFLAASGPRSLSTS AISFAEVQVQAPPVVAATPSPTA
VPEVASGETADV VQTAAEQSFAELGLGSYTPVGLIQNLLEFMHVDLGLPWWGAIAACTVFARCLIFPLIVTGQRE
AARIHNNHLPEIQKFSSRIREAKLAGDHI EYYKASSEMALYQKKHG IKLYKPLILPVTQAPIFISFFIALREMANL
PVPSLQTGGLWWFQDLTVSDPIYILPLAVTATMWAVLELGAETGVQSSDLQWMRNVIRMMPLITLPITMHFPTAV
FMYWLSSNLFSLVQVSLRIPAVRTVLKIPQRVVHDLDKLPPREGFLESF KKGWKN AEMTRQLREREQMRNQLE
LAARGPLRQTFTHNPLLQPGKDNPPNIPSSSSKPKSKYPWHD TLG

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FIGURE 3983

CTCCCGGGTCAGCTGGTGTCTGGCGTCAGGCGCTGGGCGGGCTCGCCAGGACCTGGCAAGGCTTGTTTACTATGGC
CGATGATCTGGAGCAGCAGTCTCAAGGCTGGCTGAGTAGCTGGCTGCCCACGTGGCGCCCCACTTCCATGTCTCA
GCTGAAGAATGTGGAAGCCAGGATCCTCCAGTGTCTCCAGAATAAGTTCTGGCCAGATATGTATCCCTCCCAAA
CCAGAATAAGATCTGGACGGTGACTGTGAGCCCCGAGCAAAACGACCGCACCCCCCTTGGTGATGGTGATGGTTT
TGGGGGCGGGCTGGGTCTCTGGATCCTCAACATGGACTCACTGAGTGCCCGCCGCACACTGCACACCTTCGATCT
GCTTGGCTTCGGGCGAAGCTCAAGGCCAGCATTCCCAAGGGACCCGGAGGGGGCTGAGGATGAGTTTGTGACATC
GATAGAGACATGGCGGGAGACCATGGGGATCCCCAGCATGATCCTCCTGGGGCACAGTTTGGGAGGATTCCCTGGC
CACTTCTTACTCAATCAAGTACCCTGATAGAGTTAAACACCTCATCCTGGTGGACCCATGGGGCTTTCCCTCCG
ACCAACTAACCCAGTGAGATCCGTGCACCCCCAGCCTGGGTCAAAGCCGTGGCATCTGTCTAGGACGTTCCAA
TCCATTGGCTGTTCTTCGAGTAGCTGGGCCCTGGGGGCTGGTCTGGTGCAGCGATTCCGGCCGGACTTCAAACG
CAAGTTTGCAGACTTCTTTGAAGATGATACCATATCAGAGTATATTTACCACTGCAACGCACAGAATCCAGTGG
TGAGACAGCATTCAAAGCCATGATGGAGTCTTTGGCTGGGCCCCGGCGCCCTATGCTGGAGCGAATCACTTGAT
TCGAAAAGATGTGCCTATCACTATGATCTACGGGTCCGACACCTGGATAGATACCAGTACGGGAAAAAAGGTGAA
GATGCAGCGGCCGGATTCTATGTCCGAGACATGGAGATTAAGGGTGCCTCCCACCATGTCTATGCTGACCAGCC
ACACATCTTCAATGCTGTGGTGGAGGAGATCTGCGACTCAGTTGATTGAGCTGCTCTCTGAAGAGGAAGAGGAGA
AAGCCAGAGAGTCACTCTTACCTCCCTGTCTGCTTACTCACCCACTCTGTCTTTCCTCACCAACTAACATGTGC
CAGCCAGGCAGAGTCTTGTGCTGTTCCAGAACAGGACGACAGTGAAAAGAACACTCTTGACCCCTACACTGAAGG
CTGAAGGCAGAAGCCACAAGAGGCCCTTGAGTGCCACCCCCAGGGAAGAACATAAAGGGTTGCACAATGCCACCCA
TCCACTCCTTGCCAAGTGTTACCCAGATGGTGGAGGATGTGAAGGGATTGCACCAAGCCACATCACTCTCTCTG
TGGCCTTTCTTCTCTGGGCAAAGAAGGGCTTCCAGTGGCCTTTCTCACTCTGTAGTGTGTTGGGGATAGGTT
CCATGCAAGAACACCTTCTCTCCATCCCCCACTTACCCCATCCCATAACAGTTCCATCCAGGGTCTGCTTAA
CTGCCAAGAGCAGGTCTTGAGTTCCCTTACCTGCAGAGTCTTTTCATGACCTAGGAGGTCTTATTCAAAGCC
CTCATTGACAGAGGAGGAAACAGGCCAAGGCAGGACATGGCTGGACCATGGTGATACAGCTCTGTGTGATTCAAG
TTCTGGCAGAGCTTGTAAGGCTAGAGCCCAGGTCTGCCGACACCCCTGTGCTTGTTGCACACTTGATTGCTAAGG
CTGGAGACAGGCACCATTGCCATGGGGCTGGTCTAGTCACTGGCCGAGGATAAGCCCGTCCCTGTCCCACATTC
TAGCCCCACTATGCGGGGGTGCTGTTGTCTGCTGTCTCATCCCCAGCTGCCTAAGCTAGGGACACTCAAGT
GCTTCCTTCCTTGCCCCATCTTCTCCCACTGGAGGCCCTCTGAGCCTCCCCTGTGCCTTGGGCCCTGAAGCCCC
ATATGTAGTATAGAGCAAAGGTGGCTCCTGGTGAAGAGAGGGTGGAAAGGCCCTTCAGCCCCAGGGCCATGTCTG
GGTTCCTCCATGCCATCAGTCTCTGCAGTTTCTCTACCTGCCCCCAGAGCTGAGGCCATCTGCAAGCCCCCTGCCC
ATGGCCCAATGGGGAGCCTCCAGCCACAAGTTCCTGTCTTATCAGCCACTGGGTGGTTCCCACTGCATGACCC
TCTATCCCTGCCATCTGTCCCCATGGTTTCCAGCTCAATCCACCCCTGACCCATCTGTGAGCTTTTTCCAGGGA
GCCGTTTCAGGGGTTCTGGGCAGTAGGCTGGGCCTGGCCTCAGAACCTGGTGGCTCCTGCCTGCTCCTTCACTTT
TGTAACCATCCCTTCACCAGAATGGTATTAACCTCCTGGTGCTTTGTACTACTGGTCCAGCTGCCTTGGGCTC
CTTTTCTATATTAATAAAGAAACGAGTAAAAATT

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FIGURE 3984

CATCCGGTGTGGTCGACGGGTCTCCAAGAGTTTGGGGCGCGGACCGGAGTACCTTGCGTGCAGTTATGTCGGCG
TCGGTAGTGTCTGTCAATTCGCGGTTCTTAGAAGAGTACTTGAGCTCCACTCCGCAGCGTCTGAAGTTGCTGGAC
GCGTACCTGCTGTATATACTGCTGACCGGGGCGCTGCAGTTCGGTTACTGTCTCCTCGTGGGGACCTTCCCCCTC
AACTCTTTTCTCTCGGGCTTCATCTCTTGTTGGGGAGTTTCATCCTAGCGGTTTGCCCTGAGAATACAGATCAAC
CCACAGAACAAAGCGGATTTCCAAGGCATCTCCCCAGAGCGAGCCTTTGCTGATTTTCTCTTGCCAGCACCATC
CTGCACCTTGTTGTCAATGAACCTTTGTTGGCTGAATCATTCTCATTACTTAATTGAGGAGTAGGAGACTAAAAGA
ATGTTCACTCTTTGAATTCCTGGATAAGAGTTCTGGAGATGGCAGCTTATTGGACACATGGATTTTCTTCAGAT
TTGACACTTACTGCTAGCTCTGCTTTTTATGACAGGAGAAAAGCCCAGAGTTCACTGTGTGTCAGAACAACTTTC
TAACAAACATTTATTAATCCAGCCTCTGCCTTTTCATTAAATGTAACCTTTTGCTTTCCAAATTAAAGAACTCCAT
GCCACTCCTCAAAAAAAAAAAAAA

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FIGURE 3985

MSASVVSVISRFL E E Y L S S T P Q R L K L L D A Y L L Y I L L T G A L Q F G Y C L L V G T F P F N S F L S G F I S C V G S F I L A V C L R I
Q I N P Q N K A D F Q G I S P E R A F A D F L F A S T I L H L V V M N F V G

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FIGURE 3986

GTGTTGGTTTCAGAGGAGGGACCAGGCAGAAAGGTGGTTGAGAGGCAGAGCTGCCCCTGAGTGAGCCATGCAGAGGA
TCTCCTCCCTCATCCATCTCTCTCTCTTCTGCGGCAGGAGTCATGTCAGCCATTGAGTTGGTGCCTGAACACCAAA
CAGTGCCCTGTGTCAATAGGGGTCCCTGCCACCCTCAGGTGCTCCATGAAAGGAGAAGCGATCGGTAACACTACTATA
TCAACTGGTACAGGAAGACCCAAGATATCCAGAACCCTGACCCTGCCGTGTACCAGCTGAGAGACTCTAAATCCA
GTGACAAGTCTGTCTGCCTATTACCCGATTTTGATTCTCAAACAAATGTGTCAAAAGTAAGGATTCTGATGTGT
ATATCACAGACAAAACCTGTGCTAGACATGAGGTCTATGGACTTCAAGAGCAACAGTGCTGTGGCCTGGAGCAACA
AATCTGACTTTGTCATGTGCAAACGCCCTTCAACAACAGCATTATTCCAGAAGACACCTTCTTCCCCAGCCCAGAAA
GTTCCCTGTGATGTCAAGCTGGTCGAGAAAAGCTTTGAAACAGATACGAACCTAAACTTTCAAACCTGTCAAGTGA
TTGGGTTCCGAATCCTCCTCCTGAAAGTGGCCGGGTTTAATCTGCTCATGACGCTGCGGCTGTGGTCCAGCTGAG
ATCTGCAAGATTGTAAGACAGCCTGTGCTCCCTCGCTCCTTCTCTGCAATTGCCCCCTCTTCTCCCTCTCCAAACA
GAGGGAACCTCTCCTACCCCCAAGGAGGTGAAAGCTGCTACCACCTCTGTGCCCCCGGCAATGCACCAACTGGA
TCCTACCCGAATTTATGATTAAAGATTGCTGAAGAGCTGCCAAACACTGCTGCCACCCCCTCTGTTCCCTTATTGC
TGCTTGCTCACTGCCTGACATTACGGCAGAGGCAAGGCTGCTGCAGCTCCGCTGGCTGTGCACATTCCCTCCTGC
TCCCCAGAGACTGCCTCCGCCATCCACAGATGATGGATCTTCAGTGGGTCTCTTGGGCTCTAGGTCCCGGAGA
ATGTTGTGAGGGGTTTATTTTTTTTTTAATAGTGTTTATAAAGAAAGACATAGTATTCTTCTTCTCAAGACGTGGG
GGGAAATTATCTCATTATCGAGGCCCTGCTATGCTGTGTGTCTGGGCGTGTGTATGTCCTGCTGCCGATGCCTT
CATTAAATGATTGGAAGAGC

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FIGURE 3987

CCTTATTCGAGAGGGTGT CAGGGCTGGGAGACTAGGATGTCGGACACGTGGAGCTCTATCCAGGCCCACAAGAAGC
AGCTGGACTCTCTGCGGGAGAGGCTGCAGCGGAGGCGGAAGCAGGACTCGGGGCACTTGGCAGCAGACGTTTCGCC
CTTCTGCAAGTAGTTCGCGGTTCCCTCCTCACGCTGGGGCCTCGGTTCTTCCAGCTCACTTTTACCGGACGGACGCT
TGAGCCCCACCCCTCGTCCGCTTGCCCCACTCCTCTTCAGACTGCGAGGACGTCGCCTTTGTGAGGCTGCTCAGCC
CCCTATCCCGCGAAGCAGCAAGAACCCCTTTTTGTTGCTGCTTTG

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FIGURE 3988

GAGAATTGGCTATATCCTGGAGCGAGTGCTGGGAGGTGCTAGTCCGCCGCGCCTTATTCGAGAGGTGTCAGGGCT
 GGGAGACTAGGATGTTCGGACACGTGGAGCTCTATCCAGGCCACAAGAAGCAGCTGGACTCTCTGCGGGAGAGGC
 TGCAGCGGAGGCGGAAGCAGGACTCGGGGCACCTTGGATCTACGGAATCCAGAGGCAGCATTGTCTCCAACCTTCC
 GTAGTGACAGCCCAGTGCCCTACTGCACCCACCTCTGGTGGCCCTAAGCCCAGCACAGCTTCAGCAGTTCCTGAAT
 TAGCTACAGATCCTGAGTTAGAGAAGAAGTTGCTACACCACCTCTCTGATCTGGCCTTAACATTGCCCACTGATG
 CTGTGTCCATCTGTCTTGCCATCTCCACGCCAGATGCTCCTGCCACTCAAGATGGGGTAGAAAGCCTCCTGCAGA
 AGTTTGCAGCTCAGGAGTTGATTGAGGTAAAGCGAGGTCTCCTACAAGATGATGCACATCCTACTCTTGTAACCT
 ATGCTGACCATTCCAAGCTCTCTGCCATGATGGGTGCTGTGGCAGAAAAGAAGGGCCCTGGGGAGGTAGCAGGGA
 CTGTACAGGGGCAGAAGCGGCGTGACAGGACTCGACTACAGTAGCTGCCTTTGCCAGTTTCGTTAGTCTCTG
 GTCTGAACCTCTTCAGCATCGGAACCAGCAAAGGAGCCAGCCAAGAAATCAAGGAAACATGCTGCCTCAGATGTTG
 ATCTGGAGATAGAGAGCCTTCTGAACCAACAGTCCACTAAGGAACAACAGAGCAAGAAGGTCAGTCAGGAGATCC
 TAGAGCTATTAAATACTACAACAGCCAAGGAACAATCCATTGTTGAAAAATTCGCTCTCGAGGTCGGGCCCCAAG
 TGCAAGAATTCTGTGACTATGGAACCAAGGAGGAGTGATGAAAGCCAGTGATGCTGATCGACCCTGTCGCAAGC
 TGCACTTCAGACGAATTATCAATAAACACACTGATGAGTCTTTAGGTGACTGCTCTTTCCTTAATACATGTTTCC
 ACATGGATACCTGCAAGTATGTTCACTATGAAATTGATGCTTGATGGATTCTGAGGCCCTGGCAGCAAAGACC
 ACACGCCAAGCCAGGAGCTTGCTCTTACACAGAGTGTCGGAGGTGATTCCAGTGCAGACCGACTCTTCCCACCTC
 AGTGGATCTGTTGTGATATCCGCTACCTGGACGTGATGATCTTGGGCAAGTTTGCAGTTGTGATGGCTGACCCAC
 CCTGGGATATTACATGGAAGTGCCTATGGGACCTGACAGATGATGAGATGCGCAGGCTCAACATACCCGTAC
 TACAGGATGATGGCTTTCTCTTCTCTGGGTACAGGCAGGGCCATGGAGTTGGGGAGAGAATGTC TAAATCTCT
 GGGGTATGAACGGGTAGATGAAATTATTTGGGTGAAGACAAATCAACTGCAACGCATCATTCCGACAGGCCGTA
 CAGGTCACTGGTTGAACCATGGGAAGGAACACTGCTTGGTTGGTGTCAAAGGAAATCCCCAAGGCTTCAACCAGG
 GTCTGGATTGTGATGTGATCGTAGCTGAGGTTTCGTTCCACCAGTCATAAACCAGATGAAATCTATGGCATGATTG
 AAAGACTATCTCCTGGCACTCGCAAGATTGAGTTATTTGGACGACCACACAATGTGCAACCCAACTGGATCACCC
 TTGGAAACCAACTGGATGGGATCCACCTACTAGACCCAGATGTGGTTGCACGGTTCAAGCAAAGGTACCCAGATG
 GTATCATCTCTAAACCTAAGAATTTATAGAGCACTTCCTTACAGAGCTAAGAATCCATAGCCATGGCTCTGTAA
 GCTAAACCTGAAGAGTGATATTTGTACAATAGCTTTCTTCTTTATTTAAATAAACATTTGTATTGTAAAAAAA
 AAAAAAAA

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FIGURE 3989

MSDTWSSIQAHKKQLDSLRLRERLQRRRKQDSGHLDLRNPEAALSPTFRSDSPVPTAPTSGGPKPSTASAVPELATD
PELEKKLLHHLSDLALTLPDVAISICLAISTPDAPATQDGVESLLQKFAAQELIEVKRGLLQDDAHTLVITYADH
SKLSAMMGAVAEKKGPGEVAGTVTGQKRRAEQDSTTVAAFASSLVSGLNSSASEPAKEPAKKSARKHAASDVLEI
ESLLNQSTKEQQSKKVSQEILELLNNTTAKESIVEKFRSRGRAQVQEFCDYGTKEECMKASDADRPCRKLHFR
RIINKHTDESLGDCSFLNTCFHMDTCKYVHYEIDACMDSEAPGSKDHTPSQELALTQSVGGDSSADRLFPPQWIC
CDIRYLDVSI LGKFAVVMADPPWDIHMELPYGTLTDDMRRNLNIPVLQDDGFLFLWVTGRAMELGRECLNLWGYE
RVDEIIWVKTNQLQRIIRTGRTGHWLNHGKEHCLVGKGNPQGFNQGLDCDVIVAEVRSTSHKPDEIYGMIERLS
PGTRKIELFGRPHNVQPNWITLGNQLDGIHLLDPDVVARFKQRYPDGIIISKPNL

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FIGURE 3990

TTTTGTGAAGAGACGAAGACTGAGCGGTTGTGGCCGCGTTGCCGACCTCCAGCAGCAGTCGGCTTCTCTACGCAG
AACCCGGGAGTAGGAGACTCAGAATCGAATCTCTTCTCCCTCCCTTCTTGTGAGATTTTTTGTATCTTCAGCTA
CATTTTCGGCTTTGTGAGAAACCTTACCATCAAACACGATGGCCAGCAACGTTACCAACAAGACAGATCCTCGCT
CCATGAACCTCCCGTGATTTCATTGGGAATCTCAACACTCTTGTGGTCAAGAAATCTGATGTGGAGGCAATCTTTT
CGAAGTATGGCAAAATTGTGGGCTGCTCTGTTTCATAAGGGCTTTGCCTTCGTTTCAGTATGTTAATGAGAGAAATG
CCCGGGCTGCTGTAGCAGGAGAGGATGGCAGAATGATTGCTGGCCAGGTTTTAGATATTAACCTGGCTGCAGAGC
CAAAAGTGAACCGAGGAAAAGCAGGTGTGAAACGATCTGCAGCGGAGATGTACGGGTTCAGTAACAGAACACCCCTT
CTCCGTCCCCCTCTACTCAGCTCCTCTTTTTGACTTGGACTATGACTTTCAACGGGACTATTATGATAGGATGTACA
GTTACCCAGCACGTTGACCTCCTCCTCCTCCTATTGCTCGGGCTGTAGTGCCCTCGAAACGTCAGCGTGTATCAG
GAAACACTTCACGAAGGGGGCAAAAGTGGCTTCAATTCTAAGAGTGGACAGCGGGGATCTTCCAAGTCTGGAAATG
AAAGGAGATGACCTTCAGGCCATTAAGAAGGAGCTGACCCAGATAAAACAAAAGTGGATTCTCTCCTGGAAAAC
CTGGAAAAAATTGAAAAAGAACAGAGCAAAACAAGCAGTAGAGATGAAGAATGATAAGTCAGAAGAGGAGCAGAGC
AGCAGCTCCCGTGAAGAAAAGATGAGACTAATGTGAAGATGGAGTCTGAGGGGGGTGCAGATGACTCTGCTGAGGAG
GGGGACCTACTGGATGATGATGATAATGAAGATCGGGGGGATGACCAGCTGGAGTTGATCAAGGATGATGAAAAA
GAGGCTGAGGAAGGAGAGGATGACAGAGACAGCGCCAATGGCGAGGATGACTCTTAAGCACATAGTGGGGTTTAG
AAATCTTATCCCATTTATTTCTTTACCTAGGCGCTTGCTCTAAGATCAAATTTTTTACCAGATCCTCTCCCCTAGTA
TCTTCAGCACATGCTCACTGTTCTCCCCATCCTTGTCCTTCCCATGTTTCAATTAATTCATATGCCCCGCGCCTAG
TCCCATTTTTCACTTCCTTTGACGCTCCTAGTAGTTTTGTTAAGTCTTACCCTGTAATTTTTGCTTTTAATTTTGA
TACCTCTTTATGACTTAACAATAAAAAGGATGTATGGTTTTTATCAACTGTCTCCAAAATAATCTCTTGTTATGC
AGGGAGTACAGTTCTTTTCATTCATACATAAGTTTCAGTAGTTGCTTCCCTAACTGCAAAGGCAATCTCATTTAGT
TGAGTAGCTCTTGAAAGCAGCTTTGAGTTAGAAGTATGTGTGTTACACCCTCACATTAGTGTGCTGTGTGGGGCA
GTTCAACACAAATGTAACAATGTATTTTTGTGAATGAGAGTTGGCATGTCAAATGCATCCTCTAGAAAAATAATT
AGTGTTATAGTCTTAAGATTTGTTTTCTAAAGTTGATACTGTGGGTTATTTTTGTGAACAGCCTGATGTTTGGGA
CCTTTTTTCTCAAAATAAACAAGTCCTTATTAAACCAGGAATTTGGAG

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FIGURE 3991

CGGCCCCCGCATTCCCCGCCCCACCTCCCCGCCTTGTTGTCCAACCTTCTCCCGGAGCAGCCGGAGAGCAGGCG
TCGGGACGCAGCAAAGAGAGGAGAGGCCACCATGGCGGAGCTGCAGGAGGTGCAGATCACAGAGGAGAAGCCACT
GTTGCCAGGACAGACGCCTGAGGCGGCCAAGGAGGCTGAGTTAGCTGCCCCGAATCCTCCTGGACCAGGGACAGAC
TCACTCTGTGGAGACACCATAACGGCTCTGTCACTTTCACTGTCTATGGCACCCCCAAACCCAAACGCCCAGCGAT
CCTTACCTACCACGATGTGGGACTCAACTATAAATCTTGCTTCCAGCCACTGTTTCAGTTCGAGGACATGCAGGA
AATCATTGAGAATTTGTGCGGGTTTCACTGTGGATGCCCTTGAATGGAAGAGGGAGCCCCCTGTGTTCCCTTTGGG
ATATCAGTACCCATCTCTGGACCAGCTTGCAGACATGATCCCTTGCGTCTGCAGTACCTAAATTTCTCTACAAT
AATTGGAGTTGGTGTGGAGCTGGAGCCTACATCCTGGCGAGATATGCTCTTAACCACCCGGACACTGTTGAAGG
TCTTGTCTCATCAACATTGATCCCAATGCCAAGGGTTGGATGGATTGGGCAGCCACAAGCTAACAGGCCCTCAC
CTCTTCCATTCCGGAGATGATCCTTGGACATCTTTTTCAGCCAGGAAGAGCTCTCTGGAATTTCTGAGTTGATACA
AAAGTACAGAAATATCATTACACATGCACCCAACCTGGATAACATTGAATTGTACTGGAACAGCTACAACAACCG
CCGAGACCTGAACTTTGAGCGTGGAGGTGATATCACCTCAGGTGTCTGTGATGCTGGTGGTAGGAGACCAAGC
ACCTCATGAAGATGCAGTGGTGAATGTAACCTCAAACTGGACCCACCCAGACCTCGTTCCTCAAGATGGCTGA
CTCCGGAGGTGAGCCCCAGCTGACTCAGCCAGGCAAGCTGACCGAGGCCCTTCAAGTACTTCTGCAAGGCATGGG
CTACATGGCCTCATCCTGCATGACTCGCCTGTCCCGGTCTCGTACAGCCTCTCTGACCAGTGCAGCATCCGTTGA
TGGCAACCGGTCCCGCTCTCGCACCTGTCCAGAGCAGCGAGTCTGGAATCTTTCTTCGGGGCCCCCGGGGCA
CACCATGGAGGTCTCCTGTTGAATGGCCCTTGTTGCCCTAGAGTGGGACCCAGCCCTCACCTCCCCAGAGCTAA
CCTGGGAGGTGCTGAAGGGGCATTGGGGCCACCGTAAGCAAGGGAAGGAGGAGATCATGCGGGGAGATGACCTT
GATCTTTGATTGCTACCCCTAACCTTGACCTTTAACCCGTGATTCCCCCAGCTCCTGGAAGAGATGTCCTAATAT
CTCTTAGGGACCCAGACCCCTAAATTTCTCCTCCTCCCCATTTTGATGTTAAGGTGGAGAGGGCATATGCATCCT
CTGTCCTGATCTAGGTGTCTATAGCTGAGGGGTAAGAGGTTGTTGTAGTTGTCCTGGTGCCTCCATCAGACTCTC
CCTACTTGTTCCCATATTTGCAAGGGGAGGGGATTTGGGGCTGGGGCTCCATTACCAAAGCTGAGGTGGCTTCTC
ATTAACCCCTTAGGACTCTGAAGGGTATGGACCTACGTGAATGTGTGTGTCAGGGGGAGACTTGCTGGTGGGTTAGT
GGTCTCAGGATGTGATAGAAACATCCAGTGTAAGGAAGGAGTTGGAATGGGAGTTGGCGGGCAGTGAACGAGTG
TGGGAAGGATTGGTGTGGGGCAACAGGAAGGGCCCTGGGGCCGTTTGGCTGCACTAACTTTGGTAGCTCAGTG
TGCATCTAGAGTGGGACTGGGGAGGGAGCTAAGCTTGGGCTGGGCTGCTTGGGGCTTGGCATAGGGTGGAAAGGG
CTACCTTGGGGCTCTGACCACACTGTAGTATGTGTGGAGGGTGCCCTCCCGTCTCCCACTTCTGCTATAACA
ATAAAGTGTAGAGGAATCTGAGTACCGTT

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FIGURE 3992

GCTGCCCCCTGAACCCCAGAACAACCAGCTGGATCAGTTCTCACAGGAGCTACAGGCCGGAGACTGGGAAACATGG
TTCCAAAAC TGTTCACTTCCCAAATTTGTCTGCTTCTTCTGTTGGGGCTTCTGGCTGTGGAGGGCTCACTCCATG
TCAAACCTCCACAGTTTACCTGGGCTCAATGGTTTGAACCCAGCACATCAATATGACCTCCCAGCAATGCACCA
ATGCAATGCAGGTCATTAAACAATTATCAACGGCGATGCAAAAACCAAATACTTTCTTCTTACAACTTTTGCTA
ACGTAGTTAATGTTTGTGGTAACCCAAATATGACCTGTCCTAGTAACAAAACTCGCAAAAATTGTCACCACAGTG
GAAGCCAGGTGCCTTTAATCCACTGTAACCTCACAACCTCCAAGTCCACAGAATATTTCAAAC TGCAAGGTATGCGC
AGACACCAGCAAACATGTTCTATATAGTTGCATGTGACAACAGAGATCAACGACGAGACCCTCCACAGTATCCGG
TGGTTCCAGTTCACCTGGATAGAATCATCTTAAGCTCCTGTATCAGCACTCCTCATCATCACTCATCTGCCAAGCT
CCTCAATCATAGCCAAGATCCCATCTCTCCATATACTTTGGGTATCAGCATCTGTCCTCATCAGTCTCCATACCC
CTTCAGCTTTCCTGAGCTGAAGTGCCTTGTGAACCCTGCAATAAACTGCTTTGCAAATTC

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FIGURE 3993

MVPKLF^TSQICLLLLLGLLAVEGSLHVKPPQFTWAQWFETQHINMTSQQCTNAMQVINNYQRRCKNQNTFLLTTF
ANVVNVCGNP^NMTCPSPNKTRKNCHHSGSQVPLIHCNLTTPSPQNI^SNCRYAQTPANMFYIVACDN^RDQRRDPPQY
PVVPVHLDRII

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FIGURE 3994

AGAGACTTGGGTTTTGCTCCCTAGGAGCCCTGGAATAGCTTTGGCCAGAATTCCCTATCTCCCATTAGAACCTCT
CCTTTGCGTCCTTTGTTAACCTCCAAGTCTACTTGGTGAAAACGCCCACGAAGAAGTAACAAGGACTTTGTTCCCT
AGTGTGCCAGGTTTGGGCACCAGTGCTGTAGTGGCTTTCTCTGCTGCTCCTTGTGCATCAGCAGACAGATGTGGT
TCACATAGGAAGAAAGACTAACGTAGGCAAAGATTTGCTCTTTCTTCAGCAGCCCTAGAAAGACGGCGGCCCTGGG
TGATTCACTACTCCTTCCTCACGTCCTTGATTTTATTTGAACTGAGCTCCAGATGCTCCTCCCACCCTTTTCCTC
TTGGAAGCCAAACCCCTTTGTAATCTGTATAAGGTCCACACCCCGGGAGCTGAGTGATTGCAGAACTGGCCTTC
CATCTCTCTCAGACACCAAGCTGCAGATCCAGGCTTTTCTGGGAAAGTGAGGCCACCATGGCTCTGGAGAAGTCT
CTTGTCGGGCTCCTTCTGCTTGCTGATACTGCTGGTGCTGGGCTGGGTCCAGCCTTCCCTGGGCAAGGAATCC
CGGGCCAAGAAATTCAGCGGCAGCATATGGACTCAGACAGTTCCCCCAGCAGCAGCTCCACCTACTGTAACCAA
ATGATGAGGCGCCGGAATATGACACAGGGGCGGTGCAAACCAAGTGAACACCTTTGTGCACGAGCCCCTGGTAGAT
GTCCAGAATGTCTGTTTCCAGGAAAAGGTCACCTGCAAGAACGGGCAGGGCAACTGCTACAAGAGCAACTCCAGC
ATGCACATCACAGACTGCCGCCTGACAAACGGCTCCAGGTACCCCAACTGTGCATACCGGACCAGCCGAAGGAG
AGACACATCATTGTGGCCTGTGAAGGGAGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACC
TAAGGTCAGAGCAGCGAGATACCCACCTCCCTCAACCTCATCCTCTCCACAGCTGCCTCTTCCCTCTTCCTTCC
CTGCTGTGAAAGAAGTAACTACAGTTAGGGCTCCTATTCAACACACACATGCTTCCCTTTTCTGAGTCCCATCCC
TGCGTGATTTTGGGGGTGAAGAGTGGGTTGTGAGGTGGGCCCCATGTTAACCCTCCACTCTTTCTTTCAATAAA
ACGCAGTTGCAACACCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3995

MALEKSLVRLLLLVLILLVLGWVQPSLGKESRAKKFQRQHMDSDSSPSSSSTYCNQMMRRRNMTQGRCKPVNTFV
HEPLVDVQNVCFQEKVTCKNGQGNCYKSNSSMHITDCRLTNGSRYPNCAVRTSPKERHIIVACEGSPYVPVHFDA
SVEDST

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FIGURE 3996

AACTGTGCGAACCAGACCCGGCAGCCTTGCTCAGTTCAGCATAGCGGAGCGGATCCGATCGGATCGGAGCGGATC
GGAGCACACCGGAGCAGGCTCATCGAGAAGGCGTCTGCGAGACCATGGAGAACGGATACACCTATGAAGATTATA
AGAACACTGCAGAATGGCTTCTGTCTCACACTAAGCACCGACCTCAAGTTGCAATAATCTGTGGTTCTGGATTAG
GAGGTCTGACTGATAAATTAACCTCAGGCCAGATCTTTGACTACGGTGAAATCCCCAACCTTTCCCCGAAGTACAG
TGCCAGGTTCATGCTGGCCGACTGGTGTGGGTTTCTGAATGGCAGGGCCTGTGTGATGATGCAGGGCAGGTTCC
ACATGTATGAAGGGTACCCACTCTGGAAGGTGACATTCCCAGTGAGGGTTTTCCACCTTCTGGGTGTGGACACCC
TGGTAGTCACCAATGCAGCAGGAGGGCTGAACCCCAAGTTTGAGGTTGGAGATATCATGCTGATCCGTGACCATA
TCAACCTACCTGGTTTTAGTGGTCAGAACCCTCTCAGAGGGCCCAATGATGAAAGGTTTGGAGATCGTTTCCCTG
CCATGTCTGATGCCTACGACCGGACTATGAGGCAGAGGGCTCTCAGTACCTGGAAACAAATGGGGGAGCAACGTG
AGCTACAGGAAGGCACCTATGTGATGGTGGCAGGCCCCAGCTTTGAGACTGTGGCAGAATGTCGTGTGCTGCAGA
AGCTGGGAGCAGACGCTGTTGGCATGAGTACAGTACCAGAAGTTATCGTTGCACGGCACTGTGGACTTCGAGTCT
TTGGCTTCTCACTCATCACTAACAAGGTCAATCATGGATTATGAAAGCCTGGAGAAGGCCAACCATGAAGAAGTCT
TAGCAGCTGGCAAACAAGCTGCACAGAAATTGGAACAGTTTGTCTCCATTCTTATGGCCAGCATTCCACTCCCTG
ACAAAGCCAGTTGACCTGCCTTGGAGTCGTCTGGCATCTCCACACAAGACCCAAGTAGCTGCTACCTTCTTTGG
CCCCCTTGCTGGAGTCATGTGCCTCTGTCTTAGGTTGTAGCAGAAAGGAAAAGATTCTGTCTTCACCTTTCCC
ACTTTCTTCTACCAGACCTTCTGGTGCCAGATCCTCTTCTCAAAGCTGGGATTACAGGTGTGAGCATAGTGAGA
CCTTGGCGCTACAAAATAAAGCTGTTCTCATTCTGTTCTTTCTTACACAAGAGCTGGAGCCCGTGCCCTACCAC
ACATCTGTGGAGATGCCCAGGATTTGACTCGGGCCTTAGAACTTTGCATAGCAGCTGCTACTAGCTCTTTGAGAT
AATACATTCCGAGGGGCTCAGTTCTGCCTTATCTAAATCACCAGAGACCAAACAAGGACTAATCCAATACCTCTT
GGA

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FIGURE 3997

CAGACAGACCAATCACGCGCATTCTTCGGCCACGACAAGCGCGCCTCTGATCACGTGACCAGGTCCGCTACCCAC
GTGGGGGCTCAGCGTGCACCCCTTCTTTGTGCTCGGGTTAGGAGGAGCTAGGCTGCCATCGGGCCGGTGCAGATAC
GGGGTTGCTCTTTTGTCTCATAAGAGGGGCTTCGCTGGCAGTCTGAACGGCAAGCTTGAGTCAGGACCCCTTAATTA
AGATCCTCAATTGGCTGGAGGGCAGATCTCGCGAGTAGGGCAACGCGGTAAAAATATTGCTTCGGTGGGTGACGC
GGTACAGCTGCCCAAGGGCGTTTCGTAACGGGAATGCCGAAGCGTGGGAAAAAGGGAGCGGTGGCGGAAGACGGGG
ATGAGCTCAGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGGCCGCAAAGAAAAATGACAAAGAGGCAGCAGGAG
AGGGCCCAGCCCTGTATGAGGACCCCCAGATCAGAAAACTCACCCAGTGGCAAACCTGCCACACTCAAGATCT
GCTCTTGAATGTGGATGGGCTTCGAGCCTGGATTAAGAAGAAAGGATTAGATTGGGTAAAGGAAGAAGCCCCAG
ATATACTGTGCCTTCAAGAGACCAAATGTTTCAGAGAACAACCTACCAGCTGAACCTTCAGGAGCTGCCTGGACTCT
CTCATCAATACTGGTCAGCTCCTTCGGACAAGGAAGGGTACAGTGGCGTGGGCCTGCTTTCCCGCCAGTGCCAC
TCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTGATTGTGGCTGAATTTGACTCGT
TTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGAGGTCTGGTACGACTGGAGTACCGGCAGCGCTGGGATG
AAGCCTTTCGCAAGTTTCTGAAGGGCCTGGCTTCCCGAAAGCCCCTTGTGCTGTGTGGAGACCTCAATGTGGCAC
ATGAAGAAATTGACCTTCGCAACCCCAAGGGGAACAAAAGAATGCTGGCTTCACGCCACAAGAGCGCCAAGGCT
TCGGGGAATTACTGCAGGCTGTGCCACTGGCTGACAGCTTTAGGCACCTCTACCCCAACACACCCTATGCCTACA
CCTTTTGGACTTATATGATGAATGCTCGATCCAAGAATGTTGGTTGGCGCCTTGATTACTTTTTGTTGTCCCACT
CTCTGTTACCTGCATTGTGTGACAGCAAGATCCGTTCCAAGGCCCTCGGCAGTGATCACTGTCCTATCACCTAT
ACCTAGCACTGTGACACCAACCCCTAAATCACTTTGAGCCTGGGAAATAAGCCCCCTCACTACCATTCTTTCTTT
AAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAACTAGGAATCCTCCAACCAGGCTCCTGTGAT
AGAGTTCTTTTAAGCCCAAGATTTTTTATTTGAGGGTTTTTTGTTTTTAAAAAAAAAATTGAACAAAGACTACTA
ATGACTTTGTTGAATTATCCACATGAAAATAAAGAGCCATAGTTTCAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3998

MPKRGKKGAVAEDGDELRTPEAKKSKTAAKKNCKEAAGEGPALYEDPPDQKTSPSGKPATLKICSWNVDGLRAW
IKKKGLDWVKEEAPDILCLQETKCSSENKLPaelQELPGLSHQYWSAPSDKEGYSGVGLLSRQCPLKVSYGIGDEE
HDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASRKPLVLCGDLNVAHEEIDLRNPKG
NKKNAGFTPQERQGFgELLQAVPLADSFRLYPNTPYAYTFWTYMMNARSKNVGWRLDYFLLSHSLLPALCDSKI
RSKALGSDHCPITLYLAL

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FIGURE 3999

CAGACAGACCAATCACGCGCATTCTTCGGCCACGACAAGCGCGCCTCTGATCACGTGACCAGGTCCGCTACCCAC
GTGGGGGCTCAGCGTGCACCCTTCTTTGTGCTCGGGTTAGGAGGAGCTAGGCTGCCATCGGGCCGGTGACAGATAC
GGGGTTGCTCTTTTGTCTCATAAGAGGGGCTTCGCTGGCAGTCTGAACGGCAACGCGGTAAAAATATTGCTTCGGT
GGGTGACGCGGTACAGCTGCCCAAGGGCGTTCGTAACGGGAATGCCGAAGCGTGGGAAAAAGGGAGCGGTGGCGG
AAGACGGGGATGAGCTCAGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGGCCGCAAAGAAAAATGACAAAGAGG
CAGCAGGAGAGGGGCCAGCCCTGTATGAGGACCCCCCAGATCAGAAAACCTCAGGAGTGGCAAACCTGCCACAC
TCAAGATCTGCTCTTGAATGTGGATGGGCTTCGAGCCTGGATTAAGAAGAAAGGATTAGATTGGGTAAAGGAAG
AAGCCCCAGATATACTGTGCCTTCAAGAGACCAATGTTTCAGAGAACAACCTACCAGCTGAACCTCAGGAGCTGC
CTGGACTCTCTCATCAATACTGGTCAGCTCCTTCGGACAAGGAAGGGTACAGTGGCGTGGGCCTGCTTTCCTGCC
AGTGGCCACTCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTGATTGTGGCTGAAT
TTGACTCGTTTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGAGGTCTGGTACGACTGGAGTACCGGCAGC
GCTGGGATGAAGCCTTTCGCAAGTTCTGAAGGGCCTGGCTTCCCGAAAGCCCCTTGTGCTGTGTGGAGACCTCA
ATGTGGCACATGAAGAAATTGACCTTCGCAACCCCAAGGGGAACAAAAAGAAATGCTGGCTTCACGCCACAAGAGC
GCCAAGGCTTCGGGGAATTACTGCAGGCTGTGCCACTGGCTGACAGCTTTAGGCACCTCTACCCCAACACACCCT
ATGCCTACACCTTTTGGACTTATATGATGAATGCTCGATCCAAGAATGTTGGTTGGCGCCTTGATTACTTTTGT
TGTCCCACTCTCTGTTACCTGCATTGTGTGACAGCAAGATCCGTTCCAAGGCCCTCGGCAGTGATCACTGTCCTA
TCACCTTATACCTAGCACTGTGACACCACCCCTAAATCACTTTGAGCCTGGGAAATAAGCCCCCTCAACTACCAT
TCCTTCTTTAAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAACTAGGAATCCTCCAACCAGGC
TCCTGTGATAGAGTTCTTTTAAGCCCAAGATTTTTTATTTGAGGGTTTTTTGTTTTTTAAAAAAAATTGAACAA
AGACTACTAATGACTTTGTTTGAATTATCCACATGAAAATAAAGAGCCATAGTTTCAAAAAAAAAAAAAAAAAA

A

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FIGURE 4000

MPKRGKKGAVAEDGDEL RTEPEAKKSKTAAKKNDKEAAGEGPALYEDPPDQKTSPSGKPATLKICSWNVDGLRAW
IKKKGLDWVKEEAPDILCLQETKCSENKLP AELQELPGLSHQYWSAPSDKEGYSGVGLLSRQCPLKVSYGIGDEE
HDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASRKPLVLCGDLNVAHEEIDLRNPKG
NKKNAGFTPQERQGF GELLQAVPLADSFRLYPNTPYAYTFWTYMMNARSKNVGWRLDYFLLSHSLLPALCDSKI
RSKALGSDHCPITLYLAL

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FIGURE 4001

CAGACAGACCAATCACGCGCATTCTTCGGCCACGACAAGCGCGCCTCTGATCACGTGACCAGGTCCGCTACCCAC
GTGGGGGCTCAGCGTGCACCCTTCTTTGTGCTCGGGTTAGGAGGAGCTAGGCTGCCATCGGGCCGGTGCAGATAC
GGGGTTGCTCTTTTGCTCATAAGAGGGGCTTCGCTGGCAGTCTGAACGGCAAGCTTGAGCAACGCGGTAAAAATA
TTGCTTCGGTGGGTGACGCGGTACAGCTGCCCAAGGGCGTTTCGTAACGGGAATGCCGAAGCGTGGGAAAAAGGGA
GCGGTGGCGGAAGACGGGGATGAGCTCAGGACAGAGCCAGAGGCCAAGAAGAGTAAGACGGCCGCAAAGAAAAAT
GACAAAGAGGCAGCAGGAGAGGGGCCAGCCCTGTATGAGGACCCCCCAGATCAGAAAACCTCACCCAGTGGCAAA
CCTGCCACACTCAAGATCTGCTCTTGGAATGTGGATGGGCTTCGAGCCTGGATTAAGAAGAAAGGATTAGATTGG
GTAAAGGAAGAAGCCCCAGATATACTGTGCCTTCAAGAGACCAATGTTTCAGAGAACAACCTACCAGCTGAACCTT
CAGGAGCTGCCTGGACTCTCTCATCAATACTGGTCAGCTCCTTCGGACAAGGAAGGGTACAGTGGCGTGGGCCTG
CTTTCCCGCCAGTGGCCACTCAAAGTTTCTTACGGCATAGGCGATGAGGAGCATGATCAGGAAGGCCGGGTGATT
GTGGCTGAATTTGACTCGTTTGTGCTGGTAACAGCATATGTACCTAATGCAGGCCGAGGTCTGGTACGACTGGAG
TACCGGCAGCGCTGGGATGAAGCCTTTCGCAAGTTCTGAAGGGCCTGGCTTCCCGAAAGCCCCTTGTGCTGTGT
GGAGACCTCAATGTGGCACATGAAGAAATTGACCTTCGCAACCCCAAGGGGAACAAAAAGAATGCTGGCTTCACG
CCACAAGAGCGCCAAGGCTTCGGGGAATTACTGCAGGCTGTGCCACTGGCTGACAGCTTTAGGCACCTCTACCCC
AACACACCCTATGCCTACACCTTTTGGACTTATATGATGAATGCTCGATCCAAGAATGTTGGTTGGCGCCTTGAT
TACTTTTTGTTGTCCCACTCTCTGTTACCTGCATTGTGTGACAGCAAGATCCGTTCCAAGGCCCTCGGCAGTGAT
CACTGTCCTATCACCTATACTAGCACTGTGACACCACCCCTAAATCACTTTGAGCCTGGGAAATAAGCCCCCT
CAACTACCATTCTTCTTTAAACACTCTTCAGAGAAATCTGCATTCTATTTCTCATGTATAAACTAGGAATCCT
CCAACCAGGCTCCTGTGATAGAGTTCTTTTAAGCCCAAGATTTTTTATTTGAGGGTTTTTTGTTTTTTAAAAAAA
AATTGAACAAAGACTACTAATGACTTTGTTTGAATTATCCACATGAAAATAAAGAGCCATAGTTTCAAAAAAAA
AAAAAAAAAA

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FIGURE 4002

MPKRGKKGAVAEDGDEL RTEPEAKKSKTAAKKNDKEAAGEGPALYEDPPDQKTSPSGKPATLKICSWNVDGLRAW
IKKKGLDWVKEEAPDILCLQETKCSENKLPAELQELPGLSHQYWSAPSDKEGYSGVGLLSRQCPLKVSYGIGDEE
HDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASRKPLVLCGDLNVAHEEIDLRNPKG
NKKNAGFTPQERQGF GELLQAVPLADSFRLYPNTPYAYTFWTYMMNARSKNVGWRLDYFLLSHSLLPALCDSKI
RSKALGSDHCPITLYLAL

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[illegible]

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FIGURE 4004

MPAVLGFEGSANKIGVGVRDGVLANPRRTYVTPPGTGFLPGDTARHHRVILDLLQEALTESGLTSQDIDCIA
YTKGPGMGAPLVSVAVVARTVAQLWNKPLVGVNHCIGHIEMGRLITGATSPTVLYVSGGNTQVIAYSEHRYRIFG
ETIDIAVGNCLDRFARVLKISNDPSPGYNIEQMAKRGKKLVELPYTVKGMDVSFSGILSFIEDVAHRMLATGECT
PEDLCFSLQETVFAMLVEITERAMAHCGSQEALIVGGVGCNVRLQEMMATMCQERGARLFATDERFCIDNGAMIA
QAGWEMFRAGHRTPLSDSGVTQRYRTDEVEVTWRD

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FIGURE 4005A

GGAATCGGACGCCCCAGGCATATACAAGCTGAGTTTCAGCCATGGAAAACTCCATGGGCATGTGTCTGCCCATC
CAGACATCCTCTCCTTGGAGAACCGGTGCCTGGCTATGCTCCCTGACTTACAGCCCTTGGAGAACTACATCAGC
ATGTATCTACCCACTCAGATATCCTCTCCTTGAAGAACCAGTGCCTAGCCACGCTTCCTGACCTGAAGACCATGG
AAAAACCACATGGATATGTGTCTGCCACCCAGACATCCTCTCCTTGGAGAACCAGTGCCTGGCCACACTTTCTG
ACCTGAAGACCATGGAGAAACCACATGGACATGTTTCTGCCACCCAGACATCCTCTCCTTGGAGAACCGGTGCC
TGGCCACCTCTCTAGTCTAAAGAGCACTGTGTCTGCCAGCCCTTGTTCAGAGTCTACAGATATCTCACATGA
CGCAAGCTGATTTGTACCGTGTGAACAACAGCAATTGCCTGCTCTCTGAGCCTCCAAGTTGGAGGGCTCAGCATT
TCTCTAAGGGACTAGACCTTTCAACCTGCCCTATAGCCCTGAAATCCATCTCTGCCACAGAGACAGCTCAGGAAG
CAACTTTGGGTCGTTGGTTTGATTTCAGAAGAGAAGAAAGGGGCAGAGACCCAAATGCCTTCTTATAGTCTGAGCT
TGGGAGAGGAGGAGGAGGTGGAGGATCTGGCCGTGAAGCTCACCTCTGGAGACTCTGAATCTCATCCAGAGCCTA
CTGACCATGTCCTTCAGGAAAAGAAGATGGCTCTACTGAGCTTGCTGTGCTCTACTCTGGTCTCAGAAGTAAACA
TGAACAATACATCTGACCCACCCCTGGCTGCCATTTTGAATCTGTCTGTAACCTGCCCTCCTGGAGCCTGAGT
TTATCCTCAAGGCATCTTTGTATGCCAGGCAGCAGCTGAACGTCCGGAATGTGGCCAATAACATCTTGCCATTG
CTGCTTTCTTGCCGGCGTGTGCCCCCACCTGCGACGATATTTCTGTGCCATTGTCCAGCTGCCTTCTGACTGGA
TCCAGGTGGCTGAGCTTTACCAGAGCCTGGCTGAGGGAGATAAGAATAAGCTGGTGCCCTGCCCGCTGTCTCC
GTACTGCCATGACGGACAAATTTGCCAGTTTGACGAGTACCAGCTGGCTAAGTACAACCTCGGAAGCACCGGG
CCAAGAGACACCCCGCCGGCCACCCGCTCTCCAGGGATGGAGCCTCCATTTTCTCACAGATGTTTTCCAAGGT
ACATAGGGTTTCTCAGAGAAGAGCAGAGAAAGTTTGAAGAAGGCCGGTGATACAGTGTACAGAGAAAAGAATCCTC
CAAGGTTACCCCTGAAGAAGCTGGTTTCAGCGACTGCACATCCACAAGCCTGCCAGCACGTTCAAGCCCTGCTGG
GTTACAGATACCCCTCCAACCTACAGCTCTTTTCTCGAAGTCGCCTTCTTGGCCTTGGGATTCTAGCAGAGCTG
GGAAGAGGATGAAGCTGTCTAGGCCAGAGACCTGGGAGCGGGAGCTGAGCCTACGGGGGAACAAAGCGTCGGTCT
GGGAGGAACTCATTGAAAATGGGAAGCTTCCCTTCATGGCCATGCTTCGGAACCTGTGCAACCTGTGCGGGTTG
GAATCAGTTCCTCGCCACCATGAGCTCATTTCTCAGAGACTGCCAGATGCGAAGTCGGTGATCCACAGCTCGGAGT
TTCCATTCAGATTTCTTAACGCCCATGATGCCATTGATGCCCTCGAGGCTCAACTCAGAAATCAAGCATTGCCCT
TTCCTTCGAATATAACACTGATGAGGCGGATACTAATAGAAATGAAAAGAACCCTCCAGGCGGAGGTTTCTTT
GCCACCTAAGCCGTACGAGCTTCGGATGGCAATGAGGATACCTGTGTGTATGAGCAGCTCAAGAGGGGAGAAGC
TGAGAGTACACAAGGCCAGACAGTGGAAATATGATGGTGAGATGCTGAACAGGTACCGACAGGCCCTAGAGACAG
CTGTGAACCTCTCTGTGAAGCACAGCCTGCCCTGCTGCCAGGCCGCACTGTCTTGGTCTATCTGACAGATGCTA
ATGCAGACAGGCTCTGTCCAAAGAGCAACCCACAAGGGCCCCCGCTGAACCTATGCACTGCTGTTGATTGGGATGA
TGATCACGAGGGCGGAGCAGGTGGACGTCGTGCTGTGTGGAGGTGACACTCTGAAGACTGCACTGCTTAAGGCAG
AAGAAGGCATCCTGAAGACTGCCATCAAGCTCCAGGCTCAAGTCCAGGAGTTTGATGAAAATGATGGATGGTCCC
TGAATACTTTTGGGAAATACCTGCTGTCTCTGGCTGGCCAAAGGGTTCTGTGGACAGGGTCATCTCCTTGGCC
AAAGCATGGATGATGGAATGATAAATGTGGCCAAACAGCTTTACTGGCAGCGTGTGAATTCCAAGTGCCTCTTTG
TTGGTATCCTCCTAAGAAGGGTACAATACCTGTCAACAGATTGAATCCCAATGATGTGACACTCTCAGGCTGTA
CTGATGCGATACTGAAGTTCATTGCAGAGCATGGGGCCTCCCATCTCTGGAACATGTGGGCCAAATGGACAAAA
TATTCAAGATTCCACCACCCCCAGGAAAGACAGGGGTCCAGTCTCTCCGGCCACTGGAAAGAGGACACTCCAAGCC
CCTTGGCTCCTGTTTCCAGCAAGGATGGCGCAGCATCCGGCTTTTCATTTTCATCCACTTTCCGAGACATGCATG
GGGAGCGGGACCTGCTGCTGAGGTCTGTGCTGCCAGCACTGCAGGCCCGAGCGGCCCTCACCGTATCAGCCTTC
ACGGAATCGACCTCCGCTGGGGCGTCACTGAGGAGGAGACCCGTAGGAACAGACAACCTGGAAGTGTGCCTTGGGG
AGGTGGAGAACGCACAGCTGTTTGTGGGGATTCTGGGCTCCCGTTATGGATACATTCCCCCAGCTACAACCTTC
CTGACCATCCACACTTCCACTGGGCCCAGCAGTACCCTTCAGGGCGCTCTGTGACAGAGATGGAGGTGATGCAGT
TCCTGAACCGGAACCAACGTCTGCAGCCCTCTGCCCAAGCTCTCATCTACTTCCGGGATTCCAGCTTCTCAGCT
CTGTGCCAGATGCCTGGAAATCTGACTTTGTTTCTGAGTCTGAAGAGGCCGACGTCGGATCTCAGAACTGAAGA
GCTACCTAAGCAGACAGAAAGGGATCACCTGCCGCAGATACCCCTGTGAGTGGGGGGGTGTGGCAGCTGGCCGGC
CCTATGTTGGCGGGCTGGAGGAGTTTGGGCAGTTGGTCTGCAGGATGATGGAATATGATCCAGAAGCTCTACC
TGCAGCCTGGGGCCCTGCTGGAGCAGCCAGTGTCCATCCAGACGATGACTTGGTCCAGGCCACCTTCCAGCAGC
TGCAGAAGCCACCGAGTCTGCCCGGCCACGCTTCTTCAGGACACAGTGCAACGGCTGATGCTGCCCCACGGAA
GGCTGAGCCTGGTGACGGGGCAGTCAGGACAGGGCAAGACAGCCTTCTGGCATCTCTTGTGTACGCCCTGCAGG

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FIGURE 4005B

CTCCTGATGGGGCCAAGGTGGCATCATTAGTCTTCTTCCACTTTTCTGGGGCTCGTCCTGACCAGGGTCTTGCCC
 TCACTCTGCTCAGACGCCTCTGTACCTATCTGCGTGGCCAACATAAAGAGCCAGGTGCCCTCCCCAGCACCTACC
 GAAGCCTGGTGTGGGAGCTGCAGCAGAGGCTGCTGCCAAGTCTGCTGAGTCCCTGCATCCTGGCCAGACCCAGG
 TCCTGATCATCGATGGGGCTGATAGGTAGTGGACCAGAATGGGCAGCTGATTTCACTAGTGGATCCCAAAGAAGC
 TTCCCCGGTGTGTACACCTGGTGTGCTAGTGTGTCTAGTGTATGCAGGCCCTAGGGGAGACCCCTTGAGCAGAGCCAGG
 GTGCCACGTGCTGGCCTTGGGGCCTCTGGAGGCCTCTGCTCGGGCCCGGCTGGTGAGAGAGGAGCTGGCCCTGT
 ACGGGAAGCGGCTGGAGGAGTCACCATTTAACAACCAGATGCGACTGCTGCTGGTGAAGCGGGAATCAGGCCGGC
 CGCTCTACCTGCGCTTGGTCACCGATCACCTGAGGCTCTTACGCTGTATGAGCAGGTGTCTGAGAGACTCCGGA
 CCCTGCTGCCACTGTCCCCCTGCTGCTGCAGCACATCCTGAGCACACTGGAGAAGGAGCACGGGCCTGATGTCC
 TTCCCCAGGCCTTGACTGCCCTAGAAGTCACACGGAGTGGTTGACTGTGGACCAGCTGCACGGAGTGTGAGTG
 TGTGGCGGACACTACCGAAGGGGACTAAGAGCTGGGAAGAAGCAGTGGCTGCTGGTAACAGTGGAGACCCCTACC
 CCAATGGGCCCCGTTTGCTGCTCGTCCAGAGTCTGCGCAGTTTGC TAGGGGAGGGCCCTCTGGAGCGCCCTGGTG
 CCCGGCTGTGCCTCCCTGATGGGCCCCCTGAGAACAGCAGCTAAACGTTGCTATGGGAAGAGGCCAGGGCTAGAGG
 ACACGGCACACATCCTCATTGCAGCTCAGCTCTGGAAGACATGTGACGCTGATGCCTCAGGCACCTTCCGAAGTT
 GCCCTCCTGAGGCTCTGGGAGACCTGCCTTACCACCTGCTCCAGAGCGGGAACCGTGGACTTCTTTCGAAGTTCC
 TTACCAACCTCCATGTGGTGGCTGCACACTTGAATTTGGTCTGGTCTCTCGGCTCTTGGAGGCCATGCCCTCT
 ATGCTTCTTCAGTCCCCAAAGAGGAACAAAGCTCCCCGAGGCTGACGTTGCAGTGTTCGCACCTTCTTGAGGC
 AGCAGGCTTCAATCCTCAGCCAGTACCCCCGGCTCTGCCCCAGCAGGCAGCCAACCAGCCCTTGACTCACCTC
 TTTGCCACCAAGCCTCGCTGCTCTCCCGGAGATGGCACCTCCAACACACACTACGATGGCTTAATAAAACCCGGA
 CCATGAAAAATCAGCAAAGCTCCAGCCTGTCTCTGGCAGTTTCTCATCCCCCTACTGCTGTGGCCTTCTCCACCA
 ATGGGCAAAGAGCAGCTGTGGGCACTGCCAATGGGACAGTTTACCTGTTGGACCTGAGAACCTTTCCTTACTGCT
 AGTCTGTGGTGTGAGTGGCTGTGATGGAATCTCTGCTTGTGTTGCTTCTCCGATGATACACTTCTTCTACTGCT
 TCGACGGGCTCCTGGAGCTCTGGGACCTGCAGCAGTGGTTGTCGGGTGCTGCAGACTAAGGCTCACCAAGTACCAA
 TCACTGGCTGCTGCTGAGCCAGACTGCGGCTGTATGCCACCGTGTGCTTGGGAGGATGCCTAAAGCTGTGGG
 ACACAGTCCGTGGGCAGCTGGCCTTCCAGCACACCTACCCCAAGTCCCTGAAGTGTGTTGCCCTTCCACCCAGAGG
 GGCAGGTAATAGCCACAGGCAGCTGGGCTGGCAGCATCAGCTTCTTCCAGGTGGATGGGCTCAAAGTCACCAAGG
 ACCTGGGGGACACCGGAGCCTCTATCCGTACCTTGGCCTTCAATGTGCTGGGGGGGTTGTGGCTGTGGGCCGGC
 TGGACAGTATGGTGGAGCTGTGGGCTGGCGAGAAGGGGCACGGCTGGCTGCCTTCCCTGCCACCATGGCTTTG
 TTGCTGCTGCGCTTTTCTGCTATGCGGGTTGCCAGTTACTGACGGCTGGAGAGGATGGCAAGGTTTCAAGGTGTGGT
 CAGGGTCTCTGGGTGCGCCCCGTTGGGCACCTGGGTTCCCTTTCTCTCTCTCTCTGCTGCTCTCTGCTGCTGCTGCT
 CAGATGGTGTATCGGGTGGCTGTTGGATATCGAGCGGATGGCATTAGGATCTACAAAATCTCTTCAAGGTTCCCAGG
 GGGCTCAGGGTCAAGCAGTGGATGTGGCAGTGTCCGCCCTGGCCTGGCTAAGCCCCAAGGTATTGGTGTGAGTGGT
 CAGAAGATGGGTCTTGCAGGGCTGGGCACCTCAAGGAATGCTCCCTTCACTCCCTCTGGCTCCTGTCCAGATTCC
 AGAAGCCTGTGCTAGGACTGGCCACTTCCCAGGAGCTCTTGGCTTCTGCTCAGAGGATTTACAGTGCAGCTGT
 GGCCAAGGCAGCTGCTGACGCGGCCACACAAGGCAGAAAGACTTCCCTGTGGCACTGAGCTGCGGGGACATGAGG
 GCCCTGTGAGCTGCTGTAGTTTCACTGCTGATGGAGGCAGCCTGGCCACCGGGGGCCGGGATCGGAGTCTCTCT
 GCTGGGACGTGAGGACACCCAAAACCCCTGTTTTGATCCACTCCTTCCCTGCCTGTACCGTGTACTGGGTCACTG
 GCTGTGCTGGACCAAAGATAACCTACTGATATCCTGCTCCAGTGTATGGCTCTGTGGGGCTCTGGGACCCAGAGT
 CAGGACAGCGGCTTGGTCAGTTCCCTGGGTCATCAGAGTGTGTGAGCGCTGTGGCAGCTGTGGAGGAGCACGTGG
 TGTCTGTGAGCCGGGATGGGACCTTGAAAGTGTGGGACCATCAAGGCGTGGAGCTGACCAGCATCCCTGCTCACT
 CAGGACCCATTAGCCACTGTGCAGCTGCCATGGAGCCCCGTGCAGCTGGACAGCCTGGGTGAGAGCTTCTGGTGG
 TAACCGTCGGGCTAGATGGGGCCACACGGTTATGGCATCCACTCTTGGTGTGCCAAACCCACACCCCTCTGGGAC
 ACAGCGGCCCAGTCCGTGCTGCTGCTGTTTTAGAAACCTCAGGCCTCATGCTGACCGCCTCTGAGGATGGTTCTG
 TACGGCTCTGGCAGGTTCCCTAAGGAAGCAGATGACACATGTATACCAAGGAGTTCTGCAGCCGCTACTGCTGTGG
 CTTGGGCACAGATGGTTCCATGGCAGTATCTGGAATCAAGCTGGGGAATAATCTTGTGGCAGGAAGCTAAGG
 CTGTGGCCACAGCACAGGCTCCAGGCCACATTGGTGTCTGTATCTGGTCTCTGGCACACACCTTTTTTGTCTCA
 GTGCTGATGAGAAAATCAGCGAGTGGCAAGTGAAGTGCAGGAAGGGTTCGGCACCCGGAATTTGAGTCTTACC
 TGAACCGAATTCTACAGGAGGACTTAGGGGTGCTGACAAGTCTGGATTGGGCTCCTGATGGTCACTTTCTCATCT

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FIGURE 4005C

TGGCCAAAGCAGATTTGAAGTTACTTTGCATGAAGCCAGGGGATGCTCCATCTGAAATCTGGAGCAGCTATACAG
 AAAATCCTATGATATTGTCCACCCACAAGGAGTATGGCATATTTGTCCTGCAGCCCAAGGATCCTGGAGTTCCTT
 CTTTCTTGAGGCAAAGGAATCAGGAGAGTTTGAAGAGAGGCTGAACTTTGATATAAACTTAGAGAATCCTAGTA
 GGACCCTAATATCGATAACTCAAGCCAAACCTGAATCTGAGTCCTCATTTTTGTGTGCCAGCTCTGATGGGATCC
 TATGGAACCTGGCCAAATGCAGCCCAGAAGGAGAATGGACCACAGGTAACATGTGGCAGAAAAAGCAAACACTC
 CAGAAACCCAAACTCCAGGGACAGACCCATCTACCTGCAGGGAATCTGATGCCAGCATGGATAGTGATGCCAGCA
 TGGATAGTGAGCCAACACCACATCTAAAGACACGGCAGCGTAGAAAGATTCACCTCGGGCTCTGTACAGCCCTCC
 ATGTGCTACCTGAGTTGCTGGTGACAGCTTCAAGGACAGAGATGTTAAGCTATGGGAGAGACCCAGTATGCAGC
 TGCTGGGCCTGTTCGGATGCGAAGGGTCAGTGAGCTGCCTGGAACCTTGGCTGGGCGCTAACTCCACCCTGCAGC
 TTGCCGTGGGAGACGTGCAGGGCAATGTGTACTTTCTGAATTGGGAATGAAGATGTGCCACTCGGGAATAATGAT
 ACCCCTTGCTGCTAGAGATGCAAAGCCTGAAGACACTGGTAGCTTTTAATAATTATAAAATTAATAATTTCTTGAT
 AATTATAAAAAATGAAGTGTCAAAAAATCTCAAGTGTAGGCCTGCCTGTGTCTCATGTGGATTTAGAACAGGAGG
 ATATTCTATGTGTATGTATATGTACATTCTAATGTGTGTCTCTTCTTATTCAACATTAATCCTTACTAGAACCAC
 AAGAAAGTGAATGAAATCTTTAGTAGGTACTCTTTTGAACTAGGTTTTAGAAATCTTGCATCACTCGCGGGCCC
 TAGGACCCTAGGATGCCATTCTTGCCAGGAGGAGGAATGAGAGTGATGTTGGCCAACATTCAATTTGAACAGAGC
 ATGGAAGACCTTTTCAGTTTCATCGGGAAAGAATGAGGGAGGGAATAAGTCAGTCATGCATCAGGGCATTTAGAA
 AGAGCTATGTTTCTGTACAGAGACAGCCCTTTTCTCAGAACTACCCAGAGGAGGCCGGGCATGGTGGCTCACGC
 TTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACGAGGTCAGGAGATCAAGACCATCCTGGCTAACA
 TAGTGAAACCTGTCTCTACTAAAAAATACAAAAAGTTAGCCAGG

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FIGURE 4006

GGGGCTCCACTTTCTTTCCCTCTCCGTTTTGGTGGGCTGGTTGGAGATGAAATCCACTGAGGAGGGAAGTCCAGC
ACCCTGTGTGCCAGTCCTGAACTGGCCCATCTGTAGACCCCTGAAAATCATATGGGCTTGGATTGGATATTCT
CAACAGAAAGGGTTAAAGGCTGATGGTACCTAAAGCCTGGTACTTGAATTTTGATCAAGATAAGCTGCCTTAAGT
TCTCTTCATTACACAAATGATCCTAGATAATTGATAGATCCTGTGGTTCAACTGGATTCTAGATAGAAGCTGGA
TTCATGTGATGCCAGAGGAGTAAATTTCAAGAGACTGAAACCAGATCTGAGTTTCGCTGTTCCAGTCTGGACCT
CTTTGGAGCTGTAAATCCTGGATATACTGTAGATGAGTACTGCGTTTTCTTTTATGGACTCTCTTCAGCTTCTG
GAGACCTCACTATCCTATTATGTCCTTTGTGTGAAGACATGCTGCTTTGTAATTATCGAAAGTGTGCGCATCAAAT
CTCTGGCTATGCATGGGTCACTGCCTGCTCTCACATCTTCTGTGATCAGCATGGCAGTGGTGAGTTTAGTCGCTC
ACCAGCTATCTGTCCTGCCTGCAACAGTACCCTTTCTGGAAAGCTAGATATTGTCCGCACAGAACTCAGTCCATC
AGAGGAATATAAAGCTATGGTATTGGCAGGACTGCGACCAGAGATCGTGTGGACATTAGCTCCCGAGCGCTGGC
CTTCTGGACATATCAGGTACATCAGGAACGTCTCTATCAAGAATACAATTTAGCAAGGCTGAGGGCCATCTGAA
ACAGATGGAGAAGATATATACTCAGCAAATACAAAGCAAGGATGTAGAATTGACCTCTATGAAAGGGGAGGTTAC
CTCCATGAAGAAAGTACTAGAAGAATACAAGAAAAGTTTCAAGTACATCTCTGAGAACTTATGGAGCGCAATCG
TCAGTATCAAAAGCTCCAAGGCCTCTATGATAGCCTTAGGCTACGAAACATCACTATTGCTAACCATGAAGGCAC
CCTTGAACCATCCATGATTGCACAGTCTGGTGTCTTGGCTTCCCATTAGGTAACAACCTCCAAGTTTCTTTGGA
TAATACACCTGTTGAAATCGGGGCGATGGAGATGGAGATTTTCAGTTCAGACCATTTTTTCGGGTTCTCCAC
AGCACCTGAACCCAGCAACAGCTTTTTTAGTTTTGTCTCTCCAAGTCGTGAATTAGAGCAGCAGCAAGTTTCTAG
CAGGGCCTTCAAAGTAAAAAGAATTTGAGCCACGCATAGTGTACGCACCTGTGATCCCAGCTACTTAGGAGGTT
GAGGCTGGGAGGATCACTTGAGCCCAGGAGTCTGAGGCTTTAGTGATCTAAGATCATGCCACTGCACTCCAGCCT
GGGCAACAGAGTGAGACCCTGTTTCTAAAAAAAATAAAGATAATTTAGCTAACTTCAAAAAAAAAAAAAAAAAA
AAC

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FIGURE 4007

MSLCEDMLLCNYRKCRILSGYAWVTACSHIFCDQHSGGEFSRSPAICPACNSTLSGKLDIVRTELSPSEEEKAM
VLGLRPEIVLDISSRALAFWTYQVHQERLYQEYNFSKAEGHLKQMEKIYTQQIQSKDVELTSMKGEVTSMKKVL
EEYKKKFSDisEKLMEERNRQYQKLQGLYDSLRLRNITIANHEGTLEPSMIAQSGVLGFLGNNKFLDNTFVRN
RGDGDGDFQFRPFFAGSPTAPEPSNSFFSFVSPSRELEQQQVSSRAFKVKRI

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FIGURE 4008

GAGTGGCCGGGAGATGATGGCTGATGAAGAGGAAGAAGTCAAGCCGATCTTGCAGAAATTGCAGGAACTCGTGGA
TCAGCTCTACTCATTTCGAGACTGCTATTTTCGAGACACATAGTGTTGAGGATGCTGGGAGGAAGCAACAGGATGT
GCAGAAGGAGATGGAGAAAACCTACAGCAGATGGAAGAAGTAGTGGGTTCTGTCCAGGGCAAGGCACAAGTTCT
AATGCTAACTGGGAAAAGCACTAAATGTGACTCCTGACTATAGCCCTAAGGCTGAGGAGCTTCTGTCAAAGGCTGT
GAAGCTGGAGCCCCGAGCTGGTGGAAAGCCTGGAACCAGCTGGGTGAGGTGTACTGGAAAAAGGGGATGTTGCAGC
TGCCCCACACCTGCTTCTCAGGAGCCCTCACCCATTGCAGGAACAAAGTCTCCTTGCAAAACCTGTCAATGGTGCT
TCGTGAGCTGCGGACTGACACTGAAGATGAACATTCTCACCATGTGATGGACAGTGTCCGACAGGCTAAGTTGGC
TGTTTCAGATGGATGTCCATGATGGCCGCTCCTGGTATATTCTTGGAATTTCATATCTTTCCCTTTACTTCTCTAC
TGGCCAGAACCCTAAGATCTCCCAGCAAGCCCTCAGTGCCTATGCCCAAGCAGAGAAAGTTGACAGAAAAGCTTC
TAGCAATCCTGACCTTCATCTGAACAGGGCGACGTTGCATAAATATGAAGAGAGTTATGGGGAGGCCCTGGAGGG
CTTCTCTCGGGCTGCAGCCCTGGACCTGCCTGGCCAGAGCCCCGGCAACGAGAGCAACAACCTTCTGGAATTCCT
GGATAGATTAACCAGCCTCCTTGAGAGTAAGGGAAAGGTGAAGACCAAAAAGCTGCAGAGCATGCTGGGAAGCTT
GCGCCAGCCCATCTAGGCCCTTGAGTGATGGGCACTATCAGTCAGCCTCTGGGCAGAAAGTGACCTGGAGCT
CAAGCCACTGAGTACGCTTCAGCCTGGGGTGAACAGCGGTGCCGTCATCCTGGGAAAGGTGGTATTTAGCCTCAC
CACAGAGGAGAAAGTCCCCTTTACATTTGGCCTGGTAGATTTCAGATGGACCTTGCTATGCAGTGATGGTGTACAA
TATAGTGCAGAGCTGGGGAGTGCTCATTGGAGACTCTGTAGCCATTCTTGAGCCCAACCTGCGGCTTCACCGAAT
TCAGCACAAAGGAAAGGACTATTCTTTTCCAGTGTTTCAGTGGAGACGCCCCCTCTGCTAGTGGTGAATGGGAA
GCCTCAGGGATCCAGCAGCCAGGCTGTTGCCACAGTGGCATCGCGACCACAGTGTGAATGACCTTTGACTTGCT
GCTCAACAGGGAGTGGAGGAGAGGAGACAAGGCTCTGGACAGCCGGTCCAGCCACATCCAGTGATTTCAGCAGGGA
TGGGAGGAATGTTTTAAATGAAGACTTTCTCTTTCCCTGCCTGTATTACACTTCGTATCTCTTCTCTCTCTCTG
TCCTCATCATGTTCCAGCTCTCTACAGGGCCACATACTCTTCTGGCATATCTCTCCTGTCTCTTCCACTGCTCTC
TATGTTTTTAAGCAAAGAGCATGGAATTGGTAGAAGTCTTGGGATCTTGCCATGGGACAGAGTCCCCAAGGTTCT
GTTGTTGCCTCCTTCCTAAGCCTCATATGTATATATCAGTTCAGTATTTATTGCTAAAGGAGGGGGCTTAAITTT
GTAATGGCTTTTATTTTTAGCAATTTTTATTTTTATTTTTGAACTTTAGGTCCTTCTCTTTGGGGCTGGAA
CAGAATTAAATTTGTTTG

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FIGURE 4009

MMADEEEEEVKPILQKLQELVDQLYSFRDCYFETHSVEDAGRKQQDVQKEMEKTLLQQMEEVVGSVQGKAQVLMITG
KALNVTPDYSPKAEELLSKAVKLEPELVEAWNQLGEVYWKKGDVAAAHTCFSGALTHCRNKVSLQNL SMVLRQLR
TDTEDEHSHHVMDSVRQAKLAVQMDVHDGRSWYILGNSYLSLYFSTGQNPKISQQALSAYAQAQEKVDRKASSNPD
LHLNRATLHKYEESYGEALEGFSRAAALDPAWPEPRQREQQLLEFLDRLTSLLESKGKVKTKKLQSMLGSLRPAH
LGPCSDGHYQSASGQKVTLELKLPLSTLQPGVNSGAVILGKVVFSLTTEEKVPFTFGLVDSGPCYAVMVYNIVQS
WGVLIGDSVAIPEPNLRLHRIQHKGKDYSFSSVRVETPLLLVVNGKPPQGSSSQAVATVASRPQCE

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FIGURE 4010

GCTGCTCTCCTGATCATGGCTTCTCCGAGTTCTTTACCTACTATTGCCCTCCATCTTCTCCCCGCTCTGGTCA
GAGCCGCTGTACAGTCTGAGGCCCCGAGCACGCGAGAGCGGTTGCAGGACGACTCGGTGGAACAGTCACGTCC
ATAGAACAGGCAAAAGTAGAAGAAAAGATCCAAGAGGTCTTCAGTTCTTACAAGTTCAACCACCTTGTACCAAGG
CTTGTTTTGCAGAGGGAGAAGCACTTCCATTATCTGAAAAGAGGCCTTCGACAACCTGACAGATGCCTATGAGTGT
CTGGATGCCAGCCGCCCATGGCTCTGCTATTGGATCCTGCACAGCTTGGAACCTGCTAGATGAACCCATCCCCCAG
ATAGTGGCTACAGATGTGTGTGCTAGTTCCCTGGAGCTGTGTGAGAGCCCAGAAGGTGGCTTTGGAGGAGGACCCGGT
CAGTATCCACACCTTGCACCCACATATGCAGCAGTCAATGCATTGTGCATCATTGGCACCAGGAGGCCCTATGAC
ATCATTAAACAGAGAGAAGCTTCTTCAGTATTTGTACTCCCTGAAGCAACCTGACGGCTCCTTTCTCATGCATGTC
GGAGGTGAGGTGGATGTGAGAAGCGCATACTGTGCTGCCTCCGTAGCCTCGCTGACCAACATCATCACTCCAGAC
CTCTTTGAGGGCACTGCTGAATGGATAGCAAGGTGTGAGAAGTGGGAAGGTGGCATTGGCGGGGTACCAGGGATG
GAAGCCCATGGTGGCTATACCTTCTGTGGCCTGGCCGCGCTGGTAATCCTCAAGAGGGAACGTTTCTTGAACCTG
AAGAGCTTATTACAATGGGTGACAAGCCGGCAGATGCGATTGTAAGGAGGATTTAGGGCCGCTGCAACAAGCTG
GTGGATGGCTGCTACTCCTTCTGGCAGGCGGGGCTCCTGCCCCCTGCTCCACCGCGCACTGCACGCCAAGGTGAC
CCTGCCCTTAGCATGAGCCACTGGATGTTCCATCAGCAGGCCCTGCAGGAGTACATCCTGATGTGTGCCAGTGC
CCTGCGGGGGGGCTTCTGGATAAACCTGGCAAGTGCCTGATTTCTACCACACCTGCTACTGCCCTGAGCGGCCCTG
TCCATAGCCCAGCACTTCGGCAGCGGAGCCATGTTGCATGATGTGGTCTTGGGTGTGCCCCGAAAACGCTCTGCAG
CCCCTCACCAGTGTACAACATTGGACCAGACAAGGTGATCCAGGCCACTACATACTTTCTACAGAAGCCAGTC
CCAGGTTTTGAGGAGCTTAAGGATGAGACATCGGCAGAGCCTGCAACCGACTAGAGGACCTGGGTCCCCGGCAGCT
CTTTGCTCACCCTCTCCCCAGTCAGACAAGGTTTATACGTTTCAATACATACTGCATTCTGTGCTACACAAGCC
TTAGCCTCAGTGGAGCTGTGGTTCTCTTGGTACTTTCTTGTCAAACAAAACCAATGGCTCTGGGTTTGGAGAACA
CAGTGGCTGGTTTTAAAAATTCTTTCCACACCTGTCAAACCAAAAATCTATCAGCCACGTGGTGTGGTTGGTGA
ACAGTGCATGCCAGGAGGAAGCAGTCCCTCCTCACCAGCTCTCCAGCCAGGACGATCACACAGAGATGAATGGCA
TCTGAGTATTACGGCATCCAGAGCCACTGCTGACTCCCACTTGACGCCACCATTAGTCACCAGACTGGGTGCC
CTCCGATGGGTGGAATAAGTCTGCTTCATGCCAAGGCTGGGCTTTGGGTCCCAAGATGAGTTCTCTGTAAAG
CTGTGGTGGAGTTGCACCAGGAGGTGCCCTCTGCCTCTCGACTTGACCCCTGGTCATTGTAAGGGAAAAGAGCTG
GAGGTGGGGAGAGAAAAGATCTCCTTCAGTTGGGAGTCTTCCACTTCAACACTGGAGAACTGAGCCTTGCACTC
TCCAGGTTCCAAGGCCACGCTTGGTGCACAGGCAAGACTTGCTTCAGCCCCAGGTGTGGTGAAGTACTAGACCTAGGA
AACCAATTATGAGTGGAAAGTGACCCTCTAGTTCAACTGTGCCAGAGGAAACAGCCCTCCAGTGCCCACTGCCT
CACTCCTCCCCTATCATGTACCGTGAAAACCCCTCTGATGGCCTCAAGGCAGTGCCCTGCAGGCCGAGGCCCTTCT
GGGGGTTTTCTATCTTTCTTCCACCAGACTCCAAGCCACTCTCCTCCAAGACTGTGTGTCTTTCTCACCAGA
GTATTAACACTACTAAGTCTTTACCTTAACCTTATGACTCAGGATTTATTACGTCTGCCCCACTCTAGGCTCAC
AGGAATAAAATCAAGTGCTAGACACACTGGCTGCTACTAAGGCACTAGCCTCTGTAGCTGGTGGTGGCAGCGTGG
GGTGCCGCCAGCGTGTGGTCTGGCAGTGCCCTCTGCTGTGCTGCACATTGAGCCCTTTCTCAGTCAGTGGAG
TATCAAGTTGGGCCATCTGTCTACTGACCTGGCCTTATGTAAGCAGCTGTGGGCTGCGGGCAGACAGGAGCTCA
GAGATGCAGCATGAGGCGCTTAGAAAAACCTGGCCATTTGCTGCCTCTAATTCCCTTTTGCTTTGCCATATTGGG
CTATGTATTACCTCCTTGAAATAATAAAAGAATAACATTTTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4011

MASPSSFTYYCPPSSSPVWSEPLYSLRPEHARERLQDDSVETVTSIEQAKVEEKIQEVFSSYKFNLVPRVLVQR
EKHFHYLKRGLRQLTDAYECLDASRPWLCYWILHSLELLDEPIQIVATDVCQFLELCQSPEGGFGGGPGQYPHL
APTYAAVNALCIIIGTEEAYDIINREKLLQYLYSLKQPDGSFLMHVGGEVDVRSAYCAASVASLTNIITPDLFEGT
AEWIARCQNWEGGIGGVPGMEAHHGGYTFCGLAALVILKRERSLNLKSLQWVTSRQMRFEggfQGRCNKLVDGCY
SFWQAGLLPLLHRALHAQGDPAISMHWMFHQALQEYILMCCQCPAGGLLDKPGKSRDFYHTCYCLSGLSIAQH
FGSGAMLHDVVLGVPENALQPTHPVYNIGPDKVIQATTYFLQKVPVGFEELKDETSAEPATD

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FIGURE 4012

CGSCCTCTCTGCGGGGCTCACTCTGCGCTTCACCAATGGCTTTCATTGCCAAGTCCTTCTATGACCTCAGTGCCAT
CAGCCTGGATGGGGAGAAGGTAGATTTCAATACGTTCCGGGGCAGGGCCGTGCTGATTGAGAATGTGGCTTCGCT
CTGAGGCACAACCACCCGGGACTTCACCCAGCTCAACGAGCTGCAATGCCGCTTTCCCAGGCGCCTGGTGGTCCT
TGGCTTCCCTTGCAACCAATTTGGACATCAGGAGAACTGTCAGAATGAGGAGATCCTGAACAGTCTCAAGTATGT
CCGTCTGGGGGTGGATACCAGCCCACCTTCACCCCTTGTCCAAAAATGTGAGGTGAATGGGCAGAACGAGCATCC
TGTCTTCGCCCTACCTGAAGGACAAGCTCCCCTACCCTTATGATGACCCATTTTCCCTCATGACCGATCCCAAGCT
CATCATTGAGCCCTGTGCGCCGCTCAGATGTGGCTGGAACTTTGAGAAGTTCTCATAGGGCCGGAGGGAGA
GCCCTTCCGACGCTACAGCCGCACCTTCCCAACCATCAACATTGAGCCTGACATCAAGCGCCTCCTTAAAGTTGC
CATATAGATGTGAACTGCTCAACACACAGATCTCCTACTCCATCCAGTCCTGAGGAGCCTTAGGATGCAGCATGC
CTTCAGGAGACACTGCTGGACCTCAGCATTCCCTTGATATCAGTCCCCTTCACTGCAGAGCCTTGCCCTTCCCCT
CTGCCGTGTTTCCTTTTCTCTCCCAACCCTCTGGTTGGTGATTCAACTTGGGCTCCAAGACTTGGGTAAGCTCTG
GGCCTTCACAGAATGATGGCACCTTCCTAAACCCTCATGGGTGGTGTCTGAGAGGCGTGAAGGGCCTGGAGCCAC
TCTGCTAGAAGAGACCAATAAAGGGCAGGTGTGGAAACGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4013

MAFIAKSFYDLSAISLDGEKVDFNTFRGRAVLLRMWLRSEGTTRDFTQLNELQCRFPFRLVVLGFPCNQFGHQE
NCQNEEILNSLKYVRPGGGYQPTFTLVQKCEVNGQNEHPVFAYLKDKLPYPYDDPFSLMTDPKLIWSPVRRSDV
AWNFEKFLIGPEGEPPFRYSRTFPTINIEPDIKRLKVAI

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FIGURE 4014A

GTTTGATATCTACACTCAGTATTGCAACAATTACCCCAACTCCGTGGCCGCCCTGACGGAATGCATGCGGGACAA
GCAGCAGGCCAAGTTCTTTTCGGGACCGGCAGGAGCTGCTACAGCACTCGCTGCCCTTGGGCTCCTACCTGCTGAA
GCCAGTCCAGCGCATCCTCAAGTACCACCTGCTGCTCCAGGAAATTGCCAAGCATTTTGATGAAGAAGAGGATGG
CTTTGAGGTGGTGGAGGATGCCATTGACACCATGACCTGTGTGGCCTGGTACATCAACGACATGAAGAGGAGGCA
TGAGCACGCGGTCCGGCTCCAGGAGATTGAGTCACTCCTCATCAACTGGAAGGGGGCCGACCTGACCACCTACGG
GGAGCTTGCTGGAGGGCACATTCCGCGTGCAATCGCGTGCGCAATGAAAGGACCTTTTTCTCTTTGACAAAAC
ACTGCTTATACCAAGAAGCGGGGCGATCACTTTGTCTACAAGGGCAACATCCCGGTAACCAGGCCCTGCCCAT
CTCCTCTGCCATCTTCTCTCCTTCCCAAAGGATCTGGGCTCCCCCTTCTTGCTGCTTCTTGGGGCTCCAGCACC
CCCTTCTGAGATCACCTCCCTGCTTCCCAAGGCTGTCAACCTTGTGCTTGACTGTCTTTCCCTCTGCCCTTAG
TGCTCCTCCCTGATGCTGATCGAAAGCACCAGAGACTCCCTGTGCTTCACTGTCACCCACTACAAGCACAGCAAG
CAGCAGTACAGCATCCAGGCCAAGACAGTGGAGGAGAAACGGAACTGGACTCACCACATCAAGAGGCTCATCCTA
GAGAACCACCATGCCACCATTCCCAAGAAGGCCAAGGAAGCCATCTTGGAATGGATTCTATTATCCCAATCGG
TACCGCTGCAGCCCAGAGCGGCTGAAGAAGGCTTGGTCTCCAGGATGAGGTGTCCACCAATGTGCGCCAGGGG
CGCCGGCAATCTGAGCCAACCAACACCTGCTCAGGCAACTCAACGAGAAAGGTGAGTGTGTGAGGTGGCCAGCC
ATTCCAGTGAGCGGGGAGGAGGAGGAGGGGAAGCAGCCGACAACCTGGGGTGTGACCTGAGGGTGGAGG
ATTGTCAGAATAGTGTAGAGGGAATCTGCTCCATTCCCCCAGAAGAGGGCCTCGCCCTGGCTGGCTGAGGA
GAGGGCTGGAGCTCTCCCCATGCACAGGCCTCATGCCCTTCTCTCCGAAACAATGAGAGCCGAGCAACAGGC
ACAGACCTGCGCTGCTCTGTGGCCCCCTGGGCCCTGCTCTGTGAGTCACTTCTTTGAAAGCCCAGGAGACTAGGT
GAGGGTCTGGGAGCAGGAGCCCCAGTGAGGACTTCCCCAGGGAGCTGTCCAGAGGTCTTTTTCTGCTTACTG
ATCTCTTCCCTCCCTCCCTGCCCCGCGCGTGTGCTGGGGGACCCGGTGGTGTGCTGTGAGCCCGAGCAG
CAGGAATGAAGGGAAAGGGGCGCAGGGAGTCTGAAAGCTCCAGGAGCAGCAGAAGGCCAGTGCGCGGTCTCCAA
CCAGTACTGAGAAGCGCATGAGCTTCGAGTCCATTTCTTCCCTGCCAGAGGTTGAGCCGGACCCTGAGGCTGGGA
GTGAGCAAGAGGTATTTCTGCTGTGGAAGGGCCCAGTGCCGAGGAGACGCCTTCAGACACAGAATCTCCAGAAG
TCCTGGAGACACAGCTTGATGCCCCACAGGGCCTTCTGGGGATGGACCCCCAGGTGACATGGTGGACTTCGTGG
CAGCTGAGAGCACTGAGGACCTTAAGGCCCTGAGCAGCGAGGAGGAAGAAGAAATGGGAGGTGCCGCCAGGAGC
CTGAGAGCCTTCTGCCACCTCTGTGCTGGACCAGGCCAGCGTCATTGCGGAGCGATTTGTGAGCAGCTTCTCTC
GGCGGAGCAGCGTGGCACAGGAGGACAGCAAGTCCAGTGGCTTTGGGAGCCCGCGGCTGGTCAAGCCGAGCAGCA
GCGTGCTCAGCCTGGAGGGCAGCGAGAAGGGCTGGCCCGGCAGTGGCAGTGGCACAGACTCCCTCAGTGTGAGC
TCTCCCCAGAAGTGGACATCAGTGTGGGGGTGGCCAGGAGGACAGCCCTTCTGTCAATGGGATGGAGCCCCAA
GCCCCGAGTGGAGCCTGACCGGTCTTCTCTGCAAGAAGAAGGAATCAGCACTCTCCACCGAGACCGGC
TGTTGCTAGACAAGATTAAGAGCTATTATGAAATGCAGAACACCATGATGCAGGCTTCAGCGTCCGTGCGCGGG
AGAGCCTCTCTACATCCCCAAAGGACTGGTAAGAACTCCATCTCAGGTTCAACAGCCTTCCCGGCCAGACC
CAGAGCCAGTACCTCCAGTGGGGAGCAAGAGACAGGTGGGCTCCCGGCCGACTTCGTGGGCCCTGTTTGAGCTCC
CAGGACCAAGCCAGGCAGTCAAAGGGGACCCACCTCCCATCTCAGATGCTGAGTTCCGCCCATCTTCAGAAATTG
TGAAGATCTGGGAGGGAATGGAGTCTTCCGGAGGGAGCCTGGGAAGGGGCCAGGCCAGGGCCAGGCCAATGGCT
TTGACCTGCATGAGCCACTCTTCATCCTGGAGGAGCATGAGCTGGGAGCCATCACAGAGGAGTCGGCCACTGCCT
CCCCGAAAGCTCCTCTCCCACTGAGGGGCGCAGCCCGGCCACCTGGCCCGGGAGCTGAAAGAGCTGGTGAAGG
AGCTGAGCAGCAGTACCCAGGGGGAGCTGGTGGCCCCACTGCACCCCGCATCGTGCAGCTCTCCACGTAATGG
ACAGCCACGTGAGCGAGCGCGTCAAGAACAAGGTCTACCAGCTGGCCCGCCAGTACAGCCTCCGGATCAAGAGCA
ACAAGCCAGTGATGGCCAGGCCACCACTGCAGTGGGAAAAGGTGGCCCTGAGAGGGATGGGAAGAGCCCCACTG
TGCCCTGTCTACAGGAAGAGGCTGGAGAGCCATTAGGTGGCAAAGGTAAGAGGAAGCCGGTGTGTCTCTATTG
ACTATGAGCAGCTGATGGCCAGGAGCACAGCCCTCCCAAGCCCTCCTCGGCTGGGGAGATGTACCACAGCGTT
TCTTCTTCAACCGTCTGCTGTGAGCCAGAGGACCCTCGCTGGGGGCCGGCCCTCCGCCGGAGCCCCCTCA
GCCCCACAGAGACCTTCACTGGCCCGACGTCCGTGAGCTGTGCTCCAAGTATGCCTCCCGCATGAGGCACGCC
GAGCAGGGGGCGGCCGGCCCCCGGCCACCCGTCAACAGGAGCCACTCGGTGCCGGAGAACATGGTAGAGCCAC
CTCTGTGCGGCAGGGTGGGCCGCTGCCGAGCCTGAGCACCAGAGGGGGCGGGGAGGCGGAGAGGCTGCCCAAT
CCCCTGGGCTCTGCCCCAGAGCAAGCCGGATGGAGGCGAGACCCTGTATGTCACTGCAGACCTCACCTGGAGG
ACAACCGGGGGTGATTGTATGGAGAAGGGACCCCTTCCAGCCCCACTGCAGGGCTGGAGGAGAGCAGTGGCC

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FIGURE 4014B

AGGGACCAAGCTCACCGGTGGCCCTGCTGGGGCAGGTTTCAGGACTTCCAGCAGTCTGCAGAGTGCCAGCCGAAGG
AAGAGGGTTCCAGGGACCCGGCAGACCCGAGCCAGCAGGGCAGAGTGAGAAACCTTAGAGAGAAGTTCCAGGCCT
TGAACCTCTGTCGGTTGATGCTGACTCCTGGGGGAGGGAGGAGTCATGTTGGAGGTTGGGGAAGAACCTGGGCATC
CTTCCCCTCAAGCCTGGGCTCATGGAGCCCCTGCCCAGGGCCCTCAGGTGGGCGGAAAGTCCATCCCCTCCGCCC
TTCAGGAAGGATGCTCCCGTGTGCAGGGGTCTCCTGCCTGTGCCATCCACTGGGGCTCGAGACAATTTCCCACTC
ACCTGTGAGGCCGGTGTGGCTGCTTCCCTTGTAATAGTTGTTCTCTGGTAAGAAGCCAAATATTTAAGCTCACT
TCTTCCCAGAGAGAGGAAGCTCTGCTCAGGCCTCCAGCGTTGGCTGGCCATGGCCACAGCCAGATGGAGGAGCCC
ATCCCAGGAGACTCAGGCAGTGGCCTGGAGAGGCTTTGTTCTGTAAACGGTGCCCTTTTCTTAGGGTCCAGGCAGG
AATGAAGCCAATAATTTATTGCTTTCCATTCTGTGGTATGATGTGCGTGTGCGTGAGTGTGTGGCCCCCTGTTTAT
TCCCCTCCTGTCAAGAATGAAGTGGATTTCAGTTCAGGTACTTTTGAGGGTTGTTGTGCTGACCCTGTGGTTGTGCG
CTGATGTACACACATTTTATTATTTGCCAATGGTGCAATAACCACTGCTGACCAACCCA

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FIGURE 4015

MGKGRRESESSRRSRPSGRSPTSTEKRMSEFESSISLPEVEPDPEAGSEQEVFSAVEGPSAEETPSDTESEVLE
TQLDAHQGLLGMDPPGDMVDFVAAESTEDLKALSSEEEEEEMGGAAQEPESLLPPSVLDQASVIAERFVSSFSRRS
SVAQEDSKSSGFGSPRLVSRSSSVLSLEGSEKGLARHGSATDSLSCQLSPEVDISVGVATEDSPSVNGMEPPSPG
CPVEPDRSSCKKKESALSTRDRLLLDKIKSYENAEHHDAGFSVRRRESLSYIPKGLVRNSISRFNSLPRPDPEP
VPPVGSKRQVGSRPTSWALFELPGPSQAVKGDPPPISDAEFRPSSEIVKIWEGMESSGGSPGKGPQQGQANGFDL
HEPLFILEEHHELGAITEESATASPSSSPTTEGRSPAHLARELKELVKELSSSTQGELVAPLHPRIVQLSHVMDSH
VSERVKNKVYQLARQYSLRIKSNKPVMPPLQWEKVAPERDCKSPTVPCIQEEAGEPLGGKGKRKPVLSLFDYE
QLMAQEHSPPKPSSAGEMSPQRRFFNPSAVSQRTTSPGGRPSARSPLSPTETFSWPDVRELCSKYASRDEARRAG
GGRPRGPPVNRSHSVENMVEPPLSGRVGRCRSLSTKRGRGGGEAAQSPGPLPQSKPDGGETLYVTADLTLEDNR
RVIVMEKGPLPSPTAGLEESSGQGPSSPVALLGQVQDFQQAECQPKEEGSRDPADPSQQGRVRNLREKFQALNS
VG

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FIGURE 4016A

CACGAGGCAGCACTCTCTTCGTCGCTTCGGCCAGTGTGTCTGGGCTGGGCCCTGACAAGCCACCTGAGGAGAGGCT
CGGAGCCGGGCCCCGACCCGGCGATTGCCGCCGCTTCTCTCTAGTCTCACGAGGGGTTTCCCGCCTCGCACCC
CCACCTCTGGAATTGCTTTCTTCTCTTCTCCGCGTGTGGAGGGAGCCAGCGCTTAGGCCGGAGCGAGCCTGGG
GGCCGCCCGCGTGAAGACATCGCGGGGACCGATTACCATGGAGGGCGCCGGCGGCGCAACGACAAGAAAAAG
ATAAGTTCTGAACGTCGAAAAAGAAAGTCTCGAGATGCAGCCAGATCTCGGCGAAGTAAAGAATCTGAAGTTTTT
TATGAGCTTGCTCATCAGTTGCCACTTCCACATAATGTGAGTTCGCATCTTGATAAGGCCTCTGTGATGAGGCTT
ACCATCAGCTATTTGCGTGTGAGGAACTTCTGGATGCTGGTGATTTGGATATTGAAGATGACATGAAAGCACAG
ATGAATTGCTTTTATTTGAAAGCCTTGGATGGTTTTGTTATGGTTCTCACAGATGATGGTGACATGATTTACATT
TCTGATAATGTGAACAAATACATGGGATTAACCTCAGTTTGAACCTAAGTGGACACAGTGTGTTTTGATTTTACTCAT
CCATGTGACCATGAGGAAATGAGAGAAATGCTTACACACAGAAATGGCCTTGTGAAAAAGGGTAAAGAACAAAAC
ACACAGCGAAGCTTTTTTCTCAGAATGAAGTGTACCCTAAGTACCGAGGAAGAACTATGAACATAAAGTCTGCA
ACATGGAAGGTATTGCACTGCACAGGCCACATTACCGTATATGATACCAACAGTAACCAACCTCAGTGTGGGTAT
AAGAAACCACCTATGACCTGCTTGGTGCTGATTTGTGAACCCATTCTCACCCTATCAATATTGAAATTCCTTTA
GATAGCAAGACTTTCTCAGTCGACACAGCCTGGATATGAAATTTTCTTATTGTGATGAAAGAATTACCGAATTG
ATGGGATATGAGCCAGAAGAACTTTAGGCCGCTCAATTTATGAATATTATCATGCTTTGGACTCTGATCATCTG
ACCAAACTCATCATGATATGTTTACTAAAGGACAAGTCACCACAGGACAGTACAGGATGCTTGCCAAAAGAGGT
GGATATGTCTGGGTGAAACTCAAGCAACTGTCATATATAACACCAAGAATTCTCAACCACAGTGCATTGTATGT
GTGAATTACGTTGTGAGTGGTATTATTTCAGCACGACTTGATTTTCTCCCTTCAACAAACAGAATGTGTCCTTAA
CCGGTTGAATCTTCAGATATGAAATGACTCAGCTATTACCAAAGTTGAATCAGAAGATACAAGTAGCCTCTTT
GACAACTTAAGAAGGAACCTGATGCTTTAACTTTGCTGGCCCCAGCCGCTGGAGACACAATCATATCTTTAGAT
TTTGGCAGCAACGACACAGAACTGATGACCAGCAACTTGAGGAAGTACCATTATATAATGATGTAATGCTCCCC
TCACCCAACGAAAAATTACAGAATATAAATTTGGCAATGTCTCCATTACCCACCGCTGAAACGCCAAAGCCACTT
CGAAGTAGTGCTGACCTGCATCAATCAAGAAGTTGCATTAATAATTAGAACCAATCCAGAGTCACTGGAACCTT
TCTTTTACCATGCCCCAGATTGAGGATCAGACACCTAGTCCTTCCGATGGAAGCACTAGACAAAGTTCACCTGAG
CCTAATAGTCCCAAGTGAATATTGTTTTATGTGGATAGTGATATGGTCAATGAATTCAAGTTGGAATTGGTAGAA
AAACTTTTTGCTGAAGACACAGAAGCAAAGAACCCATTTTCTACTCAGGACACAGATTTAGACTTGGAGATGTTA
GCTCCCTATATCCCAATGGATGATGACTTCCAGTTACGTTTCTTCGATCAGTTGTCCATTAGAAAGCAGTTCC
GCAAGCCCTGAAAGCGCAAGTCTCAAAGCACAGTTACAGTATTCCAGCAGACTCAAATACAAGAACCTACTGCT
AATGCCACCACTACCACTGCCACCACTGATGAATTAACCAAGTGCAGTAAAGACCGTATGGAAGACATTAAATA
TTGATTGCATCTCCATCTCTACCCACATACATAAAGAACTACTAGTGCCACATCATCACCATATAGAGATACT
CAAAGTCGGACAGCCTCACCAAACAGAGCAGGAAAAGGAGTCA TAGAACAGACAGAAAAATCTCATCCAAGAAGC
CCTAACGTGTTATCTGTGCTTTGAGTCAAAGAACTACAGTTCTTGAGGAAGAACTAAATCCAAAGATACTAGCT
TTGCAGAAATGCTCAGAGAAAGCGAAAAATGGAACATGATGGTTCACTTTTCAAGCAGTAGGAATTGGAACATTA
TTACAGCAGCCAGACGATCATGCAGCTACTACATCACTTTCTTGGAACGTGTAAAAGGATGCAAATCTAGTGAA
CAGAATGGAATGGAGCAAAAGACAATTATTTAATACCCTCTGATTTAGCATGTAGACTGCTGGGGCAATCAATG
GATGAAAGTGGATTACCACAGCTGACCAGTTATGATTGTGAAGTTAATGCTCCTATACAAGGCAGCAGAAACCTA
CTGCAGGGTGAAGAATTACTCAGAGCTTTGGATCAAGTTAACTGAGCTTTTTCTTAATTTTATTCTTTTTTTGG
ACACTGGTGGCTCACTACCTAAAGCAGTCTATTTATATTTTCTACATCTAATTTTAGAAGCCTGGCTACAATACT
GCACAACTTGGTTAGTTCAATTTTTGATCCCTTTCTACTTAATTTACATTAATGCTCTTTTTTAGTATGTTCT
TTAATGCTGGATCACAGACAGCTCATTTTCTCAGTTTTTGGTATTTAAACCATTGCATTGCATAGCATCATTT
TAAAAATGCACCTTTTTATTTATTTATTTTGGCTAGGGAGTTTATCCCTTTTTCGAATTATTTTTAAGAAGAT
GCCAATATAATTTTTGTAAGAAGGCAGTAACCTTTTCATCATGATCATAGGCAGTTGAAAAATTTTTACACCTTTT
TTTTACATTTTACATAAATAATAATGCTTTGCCAGCAGTACGTGGTAGCCACAATTGACAAATATTTTCTTA
AAAAATACCAGCACTTACTCATGGAATATATCTGCGTTTATAAACTAGTTTTTAAGAAGAAATTTTTTTGGC
CTATGAAATTGTTAAACCTGGAACATGACATTGTTAATCATATAATAATGATTCTTAAATGCTGTATGGTTTATT
ATTTAAATGGGTAAAGCCATTTACATAATATAGAAAGATATGCAATATCTAGAAAGGTATGTGGCATTATTTGG
ATAAAATTTCTCAATTCAGAGAAATCATCTGATGTTTCTATAGTCACTTTGCCAGCTCAAAAGAAAACAAATACCCT
ATGTAGTTGTGGAAGTTTATGCTAATATTGTGTAACCTGATATTAAACCTAAATGTTCTGCCTACCCTGTTGGTAT

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FIGURE 4016B

AAAGATATTTTGAGCAGACTGTAAACAAGAAAAAAAAAATCATGCATTCTTAGCAAAATTGCCTAGTATGTTAAT
TTGCTCAAAATACAATGTTTGATTTTATGCACTTTGTGCTATTAACATCCTTTTTTTCATGTAGATTTCAATAA
TTGAGTAATTTTAGAAGCATTATTTTAGGAATATATAGTTGTCACAGTAAATATCTTGTTTTTCTATGTACATT
GTACAAATTTTTCATTCCTTTTGCTCTTTGTGGTTGGATCTAACACTAACTGTATTGTTTTGTTACATCAAATAA
ACATCTTCTGTGGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4017

MEGAGGANDKKKISSERRKEKSRDAARSRRSKESEVFYELAHQLPLPHNVSSHLDKASVMRLTISYLRVRKLLDA
GDLDIEDDMKAQMNCFYLKALDGFVMVLTDDGDMIIYISDNVNKYMGLTQFELTGHSVDFTHPCDHEEMREMLTH
RNLVKKGKEQNTQRSFFLRMKCTLTSRGRTMNIKSATWVKLHCTGHIHVYDTNSNPQCGYKKPPMTCLVLICE
PIPHPSNIEIPLDSKTFLSRHSLDMKFSYCDERITELMGYEPEELLGRSIYEYHALDSHDLTKTHHDMFTKGQV
TTGQYRMLAKRGYVWVETQATVIYNTKNSQPQCIVCVNYVVGIIQHDLIFSLQQTECVLKPVESSDMKMTQLF
TKVESEDTSLSLFDKLLKEPDALTLLAPAAGDTIISLDFGSNDTETDDQQLLEEVPLYNDVMLPSPNEKLQNINLAM
SPLPTAETPKPLRSSADPALNQEVALKLEPNPESLELSFTMPQIQDQTPSPSDGSTRQSSPEPNPSEYCFYVDS
DMVNEFKLELVEKLFAEDTEAKNPFSTQDLDLEMLAPYIPMDDDFQLRSFDQLSPLESSSASPESASPQSTVT
VFQQTQIQEPTANATTTTATTDDELKTVTKDRMEDIKILIASPSPTHHKETTSATSSPYRDTQSRTASPNRAGKG
VIEQTEKSHPRSPNVLSVALSQRTTVPEEELNPKILALQNAQRKRKMEHDGSLFQAVGIGTLLQQPDDHAATTSL
SWKRVKGCKSSEQNGMEQKTIILIPSDLACRLLGQSMDESGLPQLTSYDCEVNAPIQGSRNLLQGEELLRALDQV
N

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FIGURE 4018

GGGAAGTGCTGTTGGAGCCGCTGTGGTTGCTGTCCGTGTAGTGAAAGCGCGTGCCTTTGTTTGTGTCCCTGGCCA
TGTGTCCCTGGCCATGGCGCTGCAGCTCTCCCGGGAGCAGGGAATCACCCCTGCGTGGGAGTGCCGAAATCGTGGA
CGAGTTCCTCTCATTCCGGCATCAACAGCATTCTTATATCAGCGTGGCATTATCCATCTGAAATCTTTACTCGAGT
GCAGAAATACGGACTCACCTTGCTTGTAAGTACTGATCTTGAGCTCATAAAATACCTAAATAATGTGGTGGAACA
ACTAAAAGATTGGTTATACAAGTGTTCAGTTCAGAACTGGTTGTAGTTATCTCAAATATTGAAAGTGGTGAGGT
CCTGGAAAGATGACAGTTTGATATTGAGTGTGATAAGACTGCAAAAGATGACAGTGACCCAGAGAAAAGTCTCA
GAAAGCTATTCAGGATGAAATCCGTTTCAGTCATCAGACAGATCACAGCTACAGTGACATTTCTGCCACTGTTGGA
AGTTTCTTGTTTCATTGATCTGCTGATTTACACAGACAAAGATTTGGTTGTACCTGAAAAATGGGAAGAGTCGGG
ACCACAGTTTATTACCAATTCTGAGGAAGTCTGCCTTTGTTTCATTTACTACTACAATCCACAAAGTAAATAGCAT
GGTGGCCTACAAAATTCCTGTCAATGACTGAAGATGACATGAGGAAATAATGTAATTGTAATTTTGAAATGTGGT
TTTCCTGAAATCAAGTCATCTATAGTTGATATGTTTTATTTTCATTGGTTAATTTATACATGGAGAAAACCAAAAT
GATACTTACTGAACTGTGTGTAATTGTTCCTTTTGTTTTTTTGGTACCTATTTGACTCACCATGGAGTTAACATC
ATGAATTTATTGTGCATTATTCAAAAGGAACCAGGAGGTTTTTTTTTTGTCAACATTGTGATGTATATTCCTTTG
AAGATAGTAACGTGTAGATGGAAAACTTGTGCTATAAAGCTAAGTGCTTTCCTAAATCAGATGTTTTGGTCAAGT
AGCTTGACTCAGTATAGGTAGGGAGATATTTAATTATAAAATACAGCAAAGGAAGTCTAAATATTGAGAATCTTT
GTTAAAGTCCGAAAGTAACTAATAATCTATAAACAATGAAATATTGCTGTGTAGCTCCTTTTGACCTTCATTTT
ATGCATAATTTTCCCTATCGAATCAGTTTCCAATTATTGACTTTAATTTATGTAACCTGAACCTGTGAAGGGAT
GGATATTTGTACTGCTTGATGTTCTGTGATACAGAACTCTAAAAATTTTTTTTTTGTGTTTTATAAAATCAAGTT
TTAAGTGA

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FIGURE 4019

GGAGCCGCTGTGGTTGCTGTCCGTGTAGTGAAAGCGCGTGCCTTTGTGTTGTGTCCCTGGCCATGTGTCCCTGGCC
ATGGCGCTGCAGCTCTCCCGGGAGCAGGGAATCACCTGCGTGGGAGTGCCGAAATCGTGGACGAGTTCTTCTCA
TTCGGCATCAACAGCATTTTATATCAGCGTGGCATTATCCATCTGAAATCTTTACTCGAGTGCAGAAATACGGA
CTCACCTTGCTTGTAAGTACTGATCTTGAGCTCATAAAATACCTAAATAATGTGGTGGAAACAATAAAAGTGCAC
CCAGAGAAAAGTCTCAGAAAGCTATTGAGGATGAAATCCGTTGAGTCATCAGACAGATCACAGCTACAGTGACAT
TTCTGCCACTGTTGGAAGTTTCTTGTTCAATTTGATCTGCTGATTTACACAGACAAAAGATTTGGTTGTACCTGAAA
AATGGGAAGAGTCGGGACCACAGTTTATTACCAATTCTGAGGAAGTCTGCCTTTGTTCAATTTACTACTACAATCC
ACAAAGTAAATAGCATGGTGGCCTACAAAATTCCTGTCAATGACTGAAGATGACATGAGGAAATAATGTAATTGT
AATTTTGAAATGTGGTTTTCTGAAATCAAGTCATCTATAGTTGATATGTTTTATTTTCAT

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FIGURE 4020

ATGATGTCTTATCTTAAGCAACCGCCTTACGCAGTCAATGGGCTGAGTCTGACCACTTCGGGTATGGACTTGCTG
CACCCCTCCGTGGGCTACCCGGGGCCCTGGGCTTCTTGTCCCGCAGCCACCCCCGGAAACAGCGCCGGGAGAGG
ACGACGTTCACTCGGGCGCAGCTAGATGTGCTGGAAGCACTGTTTGCCAAGACCCGGTACCCAGACATCTTCATG
CGAGAGGAGGTGGCACTGAAAATCAACTTGCCCGAGTCGAGGGTGCAGGTATGGTTTAAGAATCGAAGAGCTAAG
TGCCGCCAACACAGCAACAACAGCAGAATGGAGGTCAAAACAAAGTGAGACCTGCCAAAAAGAAGACATCTCCA
GCTCGGGAAGTGAGTTCAGAGAGTGGAACAAGTGGCCAATCACTCCCCCTCTAGCACCTCAGTCCCGACCATT
GCCAGCAGCAGTGCTCCTGTGTCTATCTGGAGCCAGCTTCCATCTCCCCACTGTGATCCCTTGTCCACCTCC
TCTTCCTGCATGCAGAGGTCCTATCCCATGACCTATACTCAGGCTTCAGGTTATAGTCAAGGATATGCTGGCTCA
ACTTCCTACTTTGGGGGCATGGACTGTGGATCATATTTGACCCCTATGCATCACCAGCTTCCCGGACCAGGGGCC
ACACTCAGTCCCATGGGTACCAATGCAGTCACCAGCCATCTCAATCAGTCCCAGCTTCTCTTTCCACCCAGGGA
TATGGAGCTTCAAGCTTGGGTTTTAACTCAACCACTGATTGCTTGATTATAAGGACCAAACTGCCTCCTGGAAG
CTTAACCTCAATGCTGACTGCTTGATTATAAAGATCAGACATCCTCGTGGAATTCAGGTTTTGTGA

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FIGURE 4021

MMSYLKQPPYAVNGLSLTTSGMDLLHPSVGYPGPWASCPAATPRKQRRERTTFTRAQLDVLEALFAKTRYPDIFM
REEVALKINLPESRVQVWFKNRRAKCRQQQQQQNGGQNKVRPAKKKTSPAREVSSESGTSGQFTPPSSTSVPTI
ASSAPVSIWSPASISPLSDPLSTSSSCMQRSYPMTYTQASGYSQGYAGSTSYFGGMDCGSYLTPMHQQLPGPGA
TLSPMGTNAVTSHLNQSPASLSTQGYGASSLGFNSTTDCLDYKDQTASWKLNFNADCLDYKDQTSSWKQVL

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FIGURE 4022

CCAGCCAACGAGCGGAAAATGGCAGACAATTTTTCGCTCCATGATGCGTTATCTGGGTCTGGAAACCCAAACCTT
CAAGGATGGCCTGGCGCATGGGGGAACCAGCCTGCTGGGGCAGGGGGCTACCCAGGGGCTTCCTATCCTGGGGCC
TACCCCGGGCAGGCACCCCCAGGGGCTTATCCTGGACAGGCACCTCCAGGCGCCTACCATGGAGCACCTGGAGCT
TATCCCGGAGCACCTGCACCTGGAGTCTACCCAGGGCCACCCAGCGGCCCTGGGGCCTACCCATCTTCTGGACAG
CCAAGTGCCCCCGGAGCCTACCCCTGCCACTGGCCCCCTATGGCGCCCCCTGCTGGGCCACTGATTGTGCCTTATAAC
CTGCCTTTGCCTGGGGGAGTGGTGCCTCGCATGCTGATAACAATTCTGGGCACGGTGAAGCCCAATGCAAACAGA
ATTGCTTTAGATTTCCAAAGAGGGAATGATGTTGCCTTCCACTTTAACCACGCTTCAATGAGAACAACAGGAGA
GTCATTGTTTGCAATACAAAGCTGGATAATAACTGGGGAAGGGAAGAAAGACAGTCGGTTTTCCCATTTGAAAGT
GGGAAACCATTCAAATACAAGTACTGGTTGAACCTGACCACTTCAAGGTTGCAGTGAATGATGCTCACTTGTTG
CAGTACAATCATCGGGTTAAAAAATCAATGAAATCAGCAAACTGGGAATTTCTGGTGACATAGACCTCACCAGT
GCTTCATATACCATGATATTAATCTGAAAGGGGCAGATTAAAAAAAAAAAAAAAAAGAATCTAAACCTTACATGTGTA
AAGGTTTCATGTTCACTGTGAGTGAATTTTTACATTCATCAATATCCCTCTTGTAAGTCATCTACTTAATAAA
TATTACAGTGAAAG

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FIGURE 4023

MADNFSLHDALSGSGNPNFQGWPGAWGNQFAGAGGYPGASYPGAYPGQAPPGAYPGQAPPGAYHGAPGAYFGAPA
PGVYPGPPSGPGAYPSSGQPSAPGAYPATGPYGAAGPLIVFYNLPLPGGVVPRMLITILGTVKPNANRIALDFQ
RGNDVAFHFNPRFNENNRVIVCNTKLDNNWGREERQSVFPFESGKPFKIQVLVEPDHFKVAVNDAHLLQYNHRV
KKLNEISKLGISGDIDLTSA SYTMI

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FIGURE 4024

CTGCGCCGCCCTTTCTCCGCTGGCAACGGCGCCGCTCCCCGCTCCTCCTCCCCAGCCATGGCGTTCACGTTTCGCGG
CCTTCTGCTACATGCTGGCGCTGCTGCTCACTGCCGCGCTCATCTTCTTCGCCATTTGGCACATTATAGCATTG
ATGAGCTGAAGACTGATTACAAGAATCCTATAGACCAGTGTAAATACCCTGAATCCCCCTGTACTCCCAGAGTACC
TCATCCACGCTTTTCTTCTGTGTCATGTTTCTTTGTGCAGCAGAGTGGCTTACACTGGGTCTCAATATGCCCCCTCT
TGGCATATCATATTTGGAGGTATATGAGTAGACCAGTGATGAGTGGCCCAGGACTCTATGACCCTACAACCATCA
TGAATGCAGATATTCTAGCATATTGTGAGAAGGAAGGATGGTGCAAAATTAGCTTTTTATCTTCTAGCATTTTTTT
ACTACCTATATGGCATGATCTATGTTTTGGTGAGCTCTTAGAACAACACACAGAAGAATTGGTCCAGTTAAGTGC
ATGCAAAAAGCCACCAAATGAAGGGATTCTATCCAGCAAGATCCTGTCCAAGAGTAGCCTGTGGAATCTGATCAG
TTACTTTAAAAAATGACTCCTTATTTTTTAAATGTTTCCACATTTTTGCTTGTGGAAAGACTGTTTTCATATGTT
ATACTCAGATAAAGATTTTTAAATGGTATTACGTATAAATTAATATAAAATGATTACCTCTGGTGTGACAGGTTT
GAACTTGCACTTCTTAAGGAACAGCCATAATCCTCTGAATGATGCATTAATTACTGACTGTCCTAGTACATTGGA
AGCTTTTGTTTATAGGAACCTGTAGGGCTCATTTTGGTTTCATTGAAACAGTATCTAATTATAAATTAGCTGTAG
ATATCAGGTGCTTCTGATGAAGTGAATGTATATCTGACTAGTGGGAACTTCATGGGTTTCCTCATCTGTCTAT
GTCGATGATTATATATGGATACATTTACAAAAATAAAAAGCGGGAATTTCCCTTCGCTTGAATATTATCCCTGT
ATATTGCATGAATGAGAGATTTCCCATATTTCCATCAGAGTAATAAATATACTTGCTTTAATTCTTAAGCATAAG
TAAACATGATATAAAAATATATGCTGAATTACTTGTGAAGAATGCATTTAAAGCTATTTTAAATGTGTTTTTATT
TGTAAGACATTACTTATTAAGAAATTGGTTATTATGCTTACTGTTCTAATCTGGTGGTAAAGGTATTCTTAAGAA
TTTGCAGGTACTACAGATTTTCAAACTGAATGAGAGAAAATTGTATAACCATCCTGCTGTTTCTTTAGTGCAAT
ACAATAAACTCTGAAATTAAG

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FIGURE 4025A

ATGGAGGGGGACCGGGTGGCCGGGCGGCCGGTGTCTGTCGTCGTTACCACTGCTACTGCTGCTGCCGTTGCTAAATG
TTGCGGGCCGCGGCGCTGCACCCAGACGAGCTCTTCCCACACGGGGAGTCTGTGGGGGGACCACTCCTGCAGGAA
GGCGACGACGAAAGCTCAGCCGTGGTGAAGCTGGCGAATCCCCTGCACTTCTACGAAGCCCCGATTAGCAACCTC
TACGTGGGCACCAACGGCATCATCTCCACTCAGGACTTCCCCAGGGAAACGCAGTATGTGGACTATGATTTCCCC
ACCGACTTCCCCGGCCATCGCCCCCTTTTCTGGCGGACATCGACACGAGCCACGGCAGAGGCCGAGTCTGTACCGA
GAGGACACCTCCCCCGCAGTGTGGGCCCTGGCCGCCCGCTATGTGCGCGCTGGCTTCCCCGCGCTCTGCGCGCTTT
ACCCCCACCCACGCCTTCTGGCCACCTGGGAGCAGGTAGGCGCTTACGAGGAGGTCAAGCGCGGGGCGCTGCCC
TCGGGAGAGCTGAACACTTTCCAGGCAGTTTGGCATCTGATGGGTCTGATAGCTACGCCCTCTTTCTTTATCCT
GCCAACGGCCTGCAGTTCTTGGAAACCGCCCCAAAGAGTCTTACAATGTCCAGCTTCAGCTTCCAGCTCGGGTG
GGCTTCTGCCGAGGGGAGGCTGATGATCTGAAGTCAGAAGGACCATATTTAGCTTGACTAGCACTGAACAGTCT
GTGAAAAATCTCTATCAACTAAGCAACCTGGGGATCCCTGGAGTGTGGGCTTTCCATATCGGCAGCACTTCCCCG
TTGGACAATGTCAGGCCAGCTGCAGTTGGAGACCTTTCCGTGCCCACTCTCTGTTCCCTGGGACGTTCTTTC
AGCCATGTACAGCCCTGGAAAGTGACTATAATGAGGACAATTTGGATTACTATGATGTGAATGAGGAGGAAGCT
GAATACCTTCCGGGTGAACCAGAGGAGGCATTGAATGGCCACAGCAGCATTGATGTTTCTTCCAATCCAAAGTG
GATACAAAGCCTTTAGAGGAATCTTCCACCTTGGATCCTCACACCAAAGAAGGAACATCTCTGGGAGAGGTAGGG
GGCCAGATTTAAAAGGCCAAGTTGAGCCCTGGGATGAGAGAGAGACCAGAAGCCAGCTCCACCAGAGGTAGAC
AGAGATTCACTGGCTCCTTCTGGGAAACCCACCCGTACCCCGAAAAACGGAAGCATCCAGCCCTACCCAGAT
GGAGGGCCAGTGCCTTCGGAATGGATGTTCCCCAGCTCATCCTGAAGAAGAAATGTTCTTCGAAGTTACCTT
GCTTCAGGTCACACTACACCTTAAAGTCGAGGGACGTATGAGGTGGGACTGGAAGACAACATAGGTTCCAACACC
GAGGTCTTCACGTATAATGCTGCCAACAGGAACCTGTGAACACAACCACAGACAATGCTCCCGGCATGCCTTC
TGCACGGACTATGCCACTGGCTTCTGCTGCCACTGCCAATCCAAGTTTATGGAAATGGGAAGCACTGTCTGCCT
GAAGGGGCACCTCACCGAGTGAATGGGAAAGTGAGTGGCCACCTCCACGTGGGCCATACACCCGTGCACTTCACT
GATGTGGACCTGCATGCGTATATCGTGGGCAATGATGGCAGAGCCTACACGGCCATCAGCCACATCCACAGCCA
GCAGCCAGGCCCTCCTCCCCCTCACACCAATTGGAGGCCTGTTTGGCTGGCTCTTTGCTTTAGAAAAACCTGGC
TCTGAGAACGGCTTCAGCCTCGCAGGTGCTGCCTTTACCCATGACATGGAAGTTACATTCTACCCGGGAGAGGAG
ACGGTTCGTATCACTCAAAGTGTGAGGGACTTGACCCAGAGAACTACCTGAGCATTAAAGACCAACATTCAAGGC
CAGGTGCCTTACGTCTCAGCAAATTTACAGCCACATCTCTCCCTACAAGGAGCTGTACCAGTACTCCGACTCC
ACTGTGACCTCTACAAGTTCAGAGACTACTCTGACTTTTGGTGCAATCAACCAACATCACTTACCAGTCAAC
CACCAGAACACTACTTACCAGGTGTGCAGGCAGCCCCCAGACCCCGTCTTCCCCACCCAGCCAGCTGAAC
GTGACCGGGTCTTTGCTTGTATAATGACGAAGAAGAGTGTCTAGATTGTCTGTGACCAATCAAATTTGGCCG
GTCAAAGAGGATTACAGCCCTCCTCGGGGAATCCTTGCTATGATGGGAGCCACATGTGTGACACAACAGCACGG
TGCCATCCAGGGACAGGTGTAGATTACACTGTGAGTGCATCTGGGTACCAGGGAGATGGACGGAAGTGTGTG
GATGAAAAATGAATGTGCAACTGGCTTTTCATCGCTGTGGCCCCAAGTCTGTATGTATCAACTTGCCTGGAAGCTAC
AGGTGTGAGTGCCGGAGTGGTTATGAGTTTGCAGATGACCGGCATACCTTGATCTTGATCACCCACCTGCCAAC
CCCTGTGAGGATGGCAGTCATACCTGTGCTCCTGCTGGGCAGGCCCGGTGTGTTACCATGGAGGCAGCACGTTT
AGCTGTGCTGCTGCTGCTGGTTATGCCGGCGATGGGCACCACTGACTGATGTAGATGAATGCTCAGAAAACAGA
TGTCACCTGACAGCTACCTGCTACAATACTCCTGGTTCTTCTCTGCGGTTGTCAACCCGGATATTATGGGGAT
GGATTTCACTGATACCTGACTCCACCTCAAGCCTGACACCTGTGAACAACAGCAGCGCCATGCCAGGGCCAG
TATGCCTACCTGGGGCCCGGTTCCACATCCCCAATGCGACGAGCAGGGCAACTTCTGCCCCCTACAGTGTCTAT
GGCAGCACTGGTTTCTGCTGGTGGTGGACCTGATGGTCTATGAAGTTCTTGGTACCCAGACTCCACCTGGCTCC
ACCCCGCCTCACTGTGGACCATCACAGAGCCACCCAGAGGCCCGCCGACCATCTGTGAGCGCTGGAGGGAAAAC
CTGCTGGAGCACTACGGTGGCACCCCGAGATGACAGTACGTGCCCACTGCGATGACCTGGGCCACTTCTATC
CCCCTGCAGTGCCACGGAAGAGCGACTTCTGCTGGTGTGTGGACAAAGATGGCAGAGAGGTGCAGGGCACCCGC
TCCAGCCAGGCACACCCCTGCGTGTATACCCACCGTCTGCTCCACCCATGGTCCGGCCACGCCCCGGCCAGAT
GTGACCCCTCCATCTGTGGGCACCTTCTGCTCTATACTCAGGGCCAGCAGATTGGCTACTTACCCCTCAATGGC
ACCAGGCTTCAGAAGGATGCAGCTAAGACCCTGCTGTCTCTGATGGCTCCATAATCGTGGGAATTGATTACGAC
TGCCGGGAGAGGATGGTGTACTGGACAGATGTTGCTGGACGGACAATCAGCCGTGCCGGTCTGGAACTGGGAGCA
GAGCCTGAGACGATCGTGAATTCAGGTCTGATAAGCCCTGAAGGACTTGCCATAGACCACATCCGCAGAACAAATG

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FIGURE 4025B

TACTGGACGGACAGTGTCTGGATAAGATAGAGAGCGCCCTGCTGGATGGCTCTGAGCGCAAGGTCTCTTCTAC
ACAGATCTGGTGAATCCCGTGCCATCGCTGTGGATCCAATCCGAGGCAACTTGTACTGGACAGACTGGAATAGA
GAAGCTCCTAAAATTGAAACGTCATCTTTAGATGGAGAAAACAGAAGAATTCTGATCAATACAGACATTGGATTG
CCCAATGGCTTAACCTTTGACCCCTTTCTCTAAACTGCTCTGCTGGGCAGATGCAGGAACCAAAAACTGGAGTGT
ACACTACCTGATGGAAC TGGACGGCGTGTCAATCAAAAACAACCTCAAGTACCCCTTCAGCATCGTAAGCTATGCA
GATCACTTCTACCACACAGACTGGAGGAGGGATGGTGTGTATCAGTAAATAAACATAGTGGCCAGTTTACTGAT
GAGTATCTCCCAGAACAACGATCTCACCTCTACGGGATAACTGCAGTCTACCCCTACTGCCCAACAGGAAGAAAG
TAAGTACAGTAATGTAAAGGAAGACTTGGAGTTTACAATCAGAACCTGGACCCTAAAGAACAGTGACTGCAAAGG
CAAAGAAAGTAAAAAAGGAATTGGCCATTAGACGTTCTGAGCATCCAAGATGAACATTTTGTAGTGCAAAAAGA
CTTTTGTGAAAAGCTGATACCTCAATCTTTACTACTGTATTTTTAAAAATGAAGGTTGTTATTGCAAGTTTAAAA
AGGTAACAGAATTTTAACTGTTGCTTATTAAAGCAACATCTTGTAACATTTATCATTAAATTTTAAAGATCAA
ATTCAATCAACTAAGAATTAGAGTTTAAAGACTCTAAACCTGATTTTTGCCATGGATTCTTCTGGCCAAGAAATT
AAAGCACATGTGATCAATATAACAATATAATCCTAAACCTTGACAGTTGGAGAAGCCAATGCAGAACTGATGGGA
AAGGACCAATTATTTATAGTTTCCCAACAAAAGTTCTAAGATTTTTTACCTCTGCATCAGTGCATTTCTATTTAT
ATCAAAAAGGTGCTAAAATGATTCAATTTGCATTTTCTGATCCTGTAGTGCCTCTATAGAAGTACCCACAGAAAGT
AAAGTATCACATTTATAAATACCAAGATGTAACAATTTTAAAAATTTCTAGATTACTCCAATAAAGTGTTTTAA
GTTT

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FIGURE 4026

MEGDRVAGRPVLSSLPVLLLLLPLMLRAAALHPDELFPHGESWGDQLLQEGDDESSAVVKLANPLHFYEARFSNL
YVGTNGIISTQDFPRETQYVDYDFPTDFPAIAPFLADIDTSHGRGRVLYREDTSPAVLGLAARYVRAGFPRSARF
TPTHAFLATWEQVGAYEEVKRGALPSGELNTFQAVLASDGSYSALFLYPANGLQFLGTRPKESYNVQLQLPARV
GFCRGEADDLKSEGPYFSLTSTEQSVKNLYQLSNLGI PGVWAFHIGSTSPLDNVRPAAVGDLSAAHSSVPLGRSF
SHATALES DYNE DNL DYYDVNEEEAEYLPGEPEEALNGHSSIDVSFQSKVDTKPLEESSTLDPHTKEGTSIGEVG
GPD LKGQVEPWDERETRSPAPPEVDRDSLAPSWETPPYPENGSIQPYPDGGPVPSEMDVPPAHPEEEIIVLR SYP
ASGHTTPLSRGTYEVGLEDNIGSNTEVFTYNAANKETCEHNHRQCSRHAFC TDYATGFCCHCQSKFYNGKHCLEP
EGAPHRVNGKVSGHLHVGH TPVHF TDVDLHAYIVGNDGRAYTAISHIPQPAQAALLPLTPIGGLFGWLFAL EKPG
SENGFSLAGAAFTHDMEVTFYPGEETVRITQTAEGLDPENLYSIKTNIQGQVPYVSANFTAHISPYKELYHYSDS
TVTSTSSRDYSLTFGAINQTWSYRIHQNITYQVCRHAPRHPSPFTTQQLNVD RVFALYNDEERVLRFAVTNQIGP
VKEDSDPTPGNPCYDGSHMCDTTARCHPGTGVDYTCECASGYQGDGRNCVDENECATGFHRCGPNSVCINLP GSY
RCECRSGYEFADDRHTCILITPPANPCEDGSHTCAPAGQARCVHHGGSTFSCACLPGYAGDGHQCTD VDECS ENR
CHPAATCYNTPGSFSCRCQPGYYGDGFQCIPDSTSSLT PCEQQQRHAQAQYAYPGARFHIPQCDEQGNFLPLQCH
GSTGFCWCVD PDGHEVPGTQT PPGSTPPHCGPSPEPTQRPTICERWREN LLEHYGGTPRDDQYVPQCDDLGHFI
PLQCHGKSDFCWCVDKDGREVGQTRS QPGTTPACIPTVAPPMVRPTPRPDVTPPSVGTFLLYTQGGQIGYLP LNG
TRLQKDAAKTLLSLHGSIIIVGIDYDCRERMVYWTDVAGRTISRAGLELGAEPETIVNSGLISPEGLAIDHIRRTM
YWTD SVLDKIESALLDGSEKVL FYTDLVNPRAI AVDP I RGNLYWTDWNREAPKIETSSLDGENRRILINTDIGL
PNGLTFDPFSKLLCWADAGTKKLECTLPDGTGRRVIQNNLKY PFSIVSYADHFYHTDWR RDGVVSVNKHSGQFTD
EYLPEQRSHLYGITAVYPYCPTGRK

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FIGURE 4027

GCGGCCACCGCTTTTAAGCCACGATTGGCGAAGGCCGCCGTCATTTTCGGAGCGACTCAGCGCCTGCCCGCCCTCT
CGCCGCGTCGCCGGTGCCTGCGCCTCCCGCTCCACCTCGCTTCTTCTCTCCCGGCCGAGGCCCGGGGGACCAGAG
CGAGAAGCGGGGACCATGTTCCGACGCAAGTTGACGGCTCTCGACTACCACAACCCCGCCGGCTTCAACTGCAAA
GATGAAACAGAATTTAGAACTTCATCGTTTGGCTTGAAGACCAGAAAATCAGGCACTACAAGATTGAAGACAGA
GGGAATTTAAGAAACATCCACAGCAGCGACTGGCCCAAGTTCTTTGAAAAGTATCTCAGAGATGTTCACTGTCCT
TTCAAGATTCAAGATCGACAAGAAGCTATTCAGTGGCTTCTTGGTTTAGCTGTTAGACTTGAATATGGAGATAAT
GCTGAAAAATACAAGGATTTAGTACCTGATAATTCAAAAAGTCTGACAATGCAACTAAAAATGCAGAACCATTTG
ATCAATTTGGATGTAAATAATCCTGATTTTAAGGCTGGTGTGATGGCTTTGGCTAACCTGCTTCAGATTGAGCGT
CATGATGATTACCTGGTAATGCTTAAGGCAATTCGGATTTTGGTTTCAGGAGCGCCTGACACAGGATGCAGTTGCT
AAGGCAATCAAACAAAAGAGGGCTTACCTGTTGCTTTAGACAAACATATTCTTGGTTTTGACACAGGAGATGCA
GTTCTTAATGAAGCTGCTCAAATTCTGCGATTGCTGCACATAGAGGAGCTCAGAGAGCTACAGACAAAAATCAAC
GAAGCCATAGTAGCTGTTCAAGCAATTATTGCTGATCCAAAGACAGACCACAGACTGGGAAAAGTTGGAAGATGA

ACACTTGAGGACTTCAGCTTCTCACCTACTTAGTACAGTTGGGAACCATACACTTCTGGCATGTTTGGAATCAA
AATGTCACATTCTCGGGGGAGGAAGCCCAGAAAATTGGGTATGTTCTAGAGATTTACCACCATTGCTTATTGCTT
TTTTCTTTAATAAAGTTTAGGAAAGTAGAA

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FIGURE 4028

MFRRKLTALDYHNPAGFNCKDETEFRNFIVWLEDQKIRHYKIEDRGNLRNIHSSDWPKFFEKYLRDVHCPFKIQD
RQEA IHWLLGLAVRLEYGDNAEKYKDLVPDNSKTADNATKNAEPLINLDVNNPDFKAGVMALANLLQIRHDDYL
VMLKAIRILVQERLTQDAVAKANQTKEGLPVALDKHILGFDTGDAVLNEAAQILRLHIEELRELQTKINEAIVA
VQAI IADPKTDHRLGKVGR

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FIGURE 4029

CCGCACTTCCAGCTCTCTGCGCAGCCCGCCGCGCAGCCCGCCGCCCCAGCCATGGCGAAGCCCCTGACGGACCAG
GAGAAGCGGCGGCAGATCAGCATCCGCGGCATCGTGGGCGTGGAGAACGTGGCAGAGCTGAAGAAGAGTTTCAAC
CGGCACCTGCACTTTCACGCTGGTCAAGGACCGCAACGTGGCCACCACCCGCGACTACTACTTCGCGCTGGCGCAC
ACGGTGC GCGACCACTGGTGGGGCGCTGGATCCGACGCGAGCAGCACTACTACGACAAGTGCCCCAAGAGGGTA
TATTACCTCTCTCTGGAATTTTACATGGGCGGAACATTACAGAACACCATGATCAACCTCGGTCTGCAAAATGCC
TGTGATGAGGCCATTTACCAGCTTGGATTGGATATAGAAGAGTTAGAAGAAATTGAAGAAGATGCTGGACTTGGC
AATGGTGGTCTTGGGAGACTTGGCTGCCTGCTTCTTGGATTCCATGGCAACCCTGGGACTTGCAGCCTATGGATAC
GGCATTCCGGTATGAATATGGGATTTTCAATCAGAAGATCCGAGATGGATGGCAGGTAGAAGAAGCAGATGATTGG
CTCAGATATGGAAACCTTGGGAGAAGTCCCGCCAGAAATTCATGCTGCCTGTGCACTTCTATGGAAAAGTAGAA
CACACCAACACCGGGACCAAGTGGATTGACACTCAAGTGGTCTGGCTCTGCCATATGACACCCCCGTGCCCGGC
TACATGAATAACACTGTCAACACCATGCGCCTCTGGTCTGCTCGGGCACCAGAAATGACTTTAACCTCAGAGACTTT
AATGTTGGAGACTACATTACAGGCTGTGCTGGACCGAAACCTGGCCGAGAACATCTCCCGGGTCTCTATCCCAAT
GACAATTTTTTTGAAGGAAGGAGCTAAGATTGAAGCAGGAATACTTTGTGGTGGCTGCAACCTTGCAAGATATC
ATCCGCCGTTTTCAAAGCCTCCAAGTTTGGCTCCACCCGTGGTGCGAGAACTGTGTTTGATGCCTTCCCGGATCAG
GTGGCCATCCAGCTGAATGATACTCACCTGCACTCGCGATCCCTGAGCTGATGAGGATTTTGTGGATATTGAA
AACTGCCCCTGGTCCAAGGCATGGGAGCTCACCCAGAAGACCTTCGCCTACACCAACCACACAGTGCTCCCGGAA
GCCCTGGAGCGCTGGCCCGTGGACCTGGTGGAGAAGCTGCTCCCTCGACATTGGAATCATTATGAGATAAAT
CAGAAGCATTTAGATAGAATTGTGGCCTTGTTCCTAAAGATGTGGACCGTCTGAGAAGGATGTCTCTGATAGAA
GAGGAAGGAAGCAAAAGGATCAACATGGCCCATCTCTGCATTGTGCGTTCCCATGCTGTGAATGGCGTGGCTAAA
ATCCACTCAGACATCGTGAAGACTAAAGTATTCAAGGACTTCAGTGAGCTAGAACCTGACAAGTTTCAGAATAAA
ACCAATGGGATCACTCCAAGGCGCTGGCTCCTACTCTGCAACCCAGGACTTGCAGAGCTCATAGCAGAGAAAATT
GGAGAAGACTATGTGAAAGACCTGAGCCAGCTGACGAAGCTCCACAGCTTCCTGGGTGATGATGTCTTCTCCTCCGG
GAACTCGCCAAGGTGAAGCAGGAGAATAAGCTGAAGTTTTCTCAGTTCCTGGAGACGGAGTACAAAGTGAAGATC
AAGCTGCCCCAGGATATCACATGGCCAAAATGATCATAAAGCTGATCACTTCAGTGGCAGATGTGGTGAACAAT
GACCTATGGTTGGAAGCAAGTTGAAAGTCATCTTCTGGAGAACTACAGAGTATCTCTTGCTGAAAAAGTCATT
CCAGCCACAGATCTGTGAGAGCAGATTTCCACTGCAGGCACCGAAGCCTCGGGGACAGGCAATATGAAGTTCATG
CTAAATGGGGCCCTAACTATCGGGACCATGGATGGGGCCAATGTGGAAATGGCAGAAGAAGCTGGGGAAGAGAAC
CTGTTTCATCTTTGGCATGAGGATAGATGATGTGGCTGCTTTGGACAAGAAAGGGTACGAGGCAAAAGAATACTAT
GAGGCACTTCCAGAGCTGAAGCTGGTCATTGATCAAAATTGACAATGGCTTTTTTTCTCCCAAGCAGCCTGACCTC
TTCAAAGATATCATCAACATGCTATTTTATCATGACAGGTTTAAAGTCTTTGCAGACTACGAAGCCTATGTCAAG
TGTCAAGATAAAGTGAGTCAGCTGTACATGAATCCAAAGGCCTGGAACACAATGGTACTCAAAAACATAGCTGCC
TCGGGGAAAATTCTCCAGTGACCGAACAATTAAGAATATGCCAAAACATCTGGAACGTGGAACCTTCAGATCTA
AAGATTTCTCTATCCAATGAATCTAACAAAGTCAATGGAAATGAACTCTACAATGTCTCTAGAAAACATAGCTT
CTTACTGAACTTGAACAT

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FIGURE 4030

MAKPLTDQEKRRQISIRGIVGVENVVAELKKSFNRLHFTLVKDRNVATTRDYYFALAHTVRDHLVGRWIRTQQHY
YDKCPKRYYLSLEFYMGRTLQNTMINLGLQNACDEAIYQLGLDIEELEEIEEDAGLGNGGLGRLAACFLDSMAT
LGLAAYGYGIRYEGIFNQKIRDGWQVEEADDWLRYGNPWEKSRPEFMPLVHFYGKVEHTNTGTKWIDTQVVLAL
PYDTPVPGYMNNTVNTMRLWSARAPNDFNLRDFNVGDYIQAVLDRNLAENISRVLYPNDNFFEGKELRLKQEFV
VAATLQDIIRRFKASKFGSTRGAGTVFADFDPQVAIQLNDRNLAENISRVLYPNDNFFEGKELRLKQEFV
TNHTVLPEALERWPDVLEKLLPRHLEIIYEINQKHLDRIVALFPKDVDRLRRMSLIEEEGSKRINMAHLCIVGS
HAVNGVAKIHSDIVKTKVFKDFSELEPDKFQNKTNGITPRRWLLCNPGLAELIAEKIGEDYVKDLSQLTKLHSF
LGDDVFLRELAKVKQENKLKFSQFLETEYKVKINPSSMFDVQVKRIHEYKRQLLNCLHVITMYNRIKKDPKKLFV
PRTVIIGGKAAPGYHMAKMIIKLITSVADVNNNDPMVGSKLKVIFLENYRVSLAEKVIPATDLSEQISTAGTEAS
GTGNMKFMLNGALTIGTMDGANVEMAEAGEENLFI FGMRIDDVAALDKKGYEAKYEEALPELKLVIDQIDNGF
FSPKQPDLFKDIINMLFYHDFKVFADYEAYVKCQDKVSQLYMNPKAWNTMVLKNIAASGKFSSDRTIKEYAQNI
WNVEPSDLKISLSNESNKVNGN

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FIGURE 4031

CATGCGTGGGCCAGCTTCTTCCTTTTACCTCGTTGCACTGCTGAGAGCAAGATGGGTCACCAGCAGCTGTACTGG
AGCCACCCGCGAAAATTCGGCCAGGGTTCTCGCTCTTGTCGTGTCTGTTCAAACCGGCACGGTCTGATCCGGAAA
TATGGCCTCAATATGTGCCGCCAGTGTTTCCGTCAGTACGCGAAGGATATCGGTTTCATTAAAGAAAGACCTGAGC
TGTCTTCCTTGGCACTGCCTATGGAGGTGACACCCATCTCCTCCATCATGGCCATCCTGAGACCGCTCGCGAAGC
CCAAGATCATCAAAAAGAGCACCAAGTTCAGTGGGAACCAGTCAGACTGATATGTCAAAATTAAGGGTAACTGGT
GGAAACACAGAGGTATTAACAACAGGGTTCATAGAAGGTTTGAGGGCCAGATCTATGCCCAACATTGGTTATGGG
AGAAACAAAAGACAAAGCACATACTGCCAGTGGCTTCTGGAAGTTCCTGGTCCACAACGTTAAGGAGCTGGAA
GTACTGCTGGTGAGCAACAAATCTTACTGTGTTGAGATCACTCATGATGTTTCTTCCAAGAACTGCAAAGCCATC
TTGGAAAGAGCAGCCCAGGTGGTCATCAGAGTCACCAATGCCAATGCCAGCCTGCACAGTGCAGAAAGTGAATAG
ACAGTGAATGTGTTTGTGTTTATTGGGGTTTAAATAAAACCAATAAAACTGTAAAAAC

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FIGURE 4032

GTAGCGGGAGCGGAGAGCGGACCCAGAGAGCCCTGAGCAGCCCCACCGCCGCCGCCGGCCTAGTTACCGTCACA
CCCCGGGAGGAGCCGCAGCTGCCGCAGCCGGCCGCAGTCACCATCACCGCAACCATGAGCAGCGAGGCCGAGACC
CAGCAGCCGCCCGCCGCCCGCCCTCAGCGCCGCCGACACCAAGCCCGGCACTACCGGCAGCGGCCGAGGGAGC
GGTGGCCCGGGCGGCCCTCACATCGGCGGGCGCCTGCCGGCGGGCACAAAAAGGTCATCGCAACGAAGGTTTTGGGA
ACGGTAAAATGGTTCAATGTAAGGAACGGATATGGTTTCATCCACAGGAACGACACCAAGGAAGATGTATTTGTA
CACCACACTGCCATGAAGAAGAATAACCCAGGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTT
GATGTTGTTGAAGGAGAAAAGGGTGCGAAGGCAGCAATGTTACAGGTCCTGGTGGTGTTCAGTTCAAGGCAGT
AAATATGCAGCAGACCGTAACCATTATAGACGCTATCCACGTCTAGGGGTCTCCACGCAATTACCAGCAAAAT
TACCAGAATAGTGAGAGTGGGGAAGAAGAGGGGATCGGAGAGTGCTCCCGAAGGCCAGGCCCAACAACGCCGG
CCCTACCGCAGGCGAAGGTTCCACCTTACTACATGCGGAGACCCTATGGGCGTCGACCACAGTATTCCAACCT
CCTGTGCAGGGAGAAGTGATGGAGGGTGCTGACAACCAGGGTGCAAGGAGACAAGGTAGACCAGTGAGGCAGAAT
ATGTATCGGGGATATAGACCACGATTCCGCAGAGGCCCTCTCTCCAAAGACAGCCTAGAGAGGACGGCAATGAA
GAAGATAAAGAAAATCAAGGAGATGAGACCCAAGGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAAT
TACCGACGCCGACGCCCAGAAAACCCTAAACCACAAGATGGCAAAGAGACAAAAGCAGCCAATCCACCAGCTGAG
AATTCGTCCGCTCCCGAGGCTGAGCAGGGCGGGGCTTGAGTAAATGCCGGCTTACCATCTCTACCATCATCCGGT
TTAGTCATCCAACAAGAAGAAATAATGAAATTCAGCAATAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTA
AATGCTTGCATTTTGCCCGTTGACCAGATAAATAGATCTGCATTATCTATGCAGCATGGGGTTTTTATTATTTTT
ACCTAAAGACGTCCTTTTTTGGTAATAACAAACGTGTTTTTAAAAAAGCCTGGTTTTTCTGAATACGCCTTTAA
AGG

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FIGURE 4033

AAGAATAACCCCAGGAAGTACCTTCGCAATTCCAACCCTCCTGTGCAGGGAGAAAGTGATGGAGGGTGCTGACAAC
CAGGGTGCAGGAGAACAAAGGTAGACCAGTGAGGCAGAATATGTATCGGGGATATAGACCACGATTCCGCAGAGGC
CCTCCTCTCCAAAGACAGCCTAGAGAGGACGGCAATGAAGAAGATAAAAGAAAATCAAGGAGATGAGACCCAAGGT
CAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTACCGACGCGGACGCCCAGAAAACCCCTAAACCACAA
GATGGCAAAGAGACAAAAGCAGCCAATCCACCAGCTGAGAATTCGTCCGCTCCCGAGGCTGAGCAGGGCGGGGCT
TGAGTAAATGCCGGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAAGAAGAAATAATGAAATTCCAG
CAATAAGAAATGAACAAAAGATTGATCTGCATTATCTATGCAGCATGGGGTTTTTTATTATTTTTTACCTAAAGACG
TCTCTTTTTTGGTAATAACAAACGTGTTTTTT

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FIGURE 4034

CGGGAGCGGAGAGCGGACCCAGAGAGCCCTGAGCAGCCCCACCGCCGCCGCCGGCCTAGTTACCGTCACACCCC
GGGAGGAGCCGCAGCTGCCGCAGCCGGCCGCGAGTCACCATCACCGCAACCATGAGCAGCGAGGCCGAGACCCAGC
AGCGCGGCGCCTGCCGGCGGGCACAAAAAGGTCATCGCAACGAAGGTTTTGGGAACGGTAAAAATGGTTCAATGTA
AGGAACGGATATGGTTTTTCATCCACAGGAACGACACCAAGGAAGATGTATTTGTACACCACACTGCCATGAAGAAG
AATAACCCAGGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAAAAG
GGTGCGAAGGCAGCAAATGTTACAGGTCCTGGTGGTGTTCAGTTCAAGGCAGTAAATATGCAGCAGACCGTAAC
CATTATAGACGCTATCCACGTCCTAGGGGTCCTCCACGCAATTACCAGCAAAATTACCAGAATAGTGAGAGTGGG
GAAAAGAACGAGGGATCGGAGAGTGCTCCCGAAGGCCAGGCCCAACAACGCCGCCCTACCGCAGGCGAAGGTTTC
CCACCTTACTACATGCGGAGACCCCTATGGGCGTCGACCACAGTATTCCAACCCCTCCTGTGCAGGGAGAAAGTGATG
GAGGGTGCTGACAACCAGGGTGAGGAGAACAAAGGTAGACCAGTGAGGCAGAAATATGTATCGGGGATATAGACCA
CGATTCCGCAGAGGCCCTCCTCTCAAAGAC

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FIGURE 4035

GCGAGGCGCGGGGAAGGCGCACCTGGGGTGGCCCTGGCGTGCGGGCGGGCGACATGGAGGACGGCGTGCTCAAGGA
GGGCTTCCTGGTCAAGAGGGGCCACATTGTCCACAACCTGGAAGGCGCGATGGTTCATCCTTCGGCAGAACACGCT
GGTGTACTACAAGCTTGAGGGGGGTTCGGAGAGTGACCCCTCCCAAGGGCCGGATCCTCCTGGATGGCTGCACCAT
CACCTGCCCCCTGCCTGGAGTATGAAAACCGACCGCTCCTCATTAAAGCTGAAGACTCAAACATCCACGGAGTACTT
CCTGGAGGCCTGTTCTCGAGAGGAGCGGGATGCCTGGGCCTTTGAGATCACCGGGGCTATTCATGCAGGGGCAGCC
GGGGAAGGTCCAGCAGCTGCACAGCCTGAGAACTCCTTCAAGCTGCCCCCGCACATCAGCCTGCATCGCATTGT
GGACAAGATGCACGATAGCAACACCGGAATCCGTTCAAGCCCCAACATGGAGCAGGGGAAGCACCTATAAAAAAGAC
CTTCCTCGGCTCCTCCCTGGTGGACTGGCTCATCTCCAACAGCTTCACGGCCAGCCGTCTGGAGGCGGTGACCCCT
GGCCTCCATGCTCATGGAGGAGAACTTCCTCAGGCCTGTGGGTGTCCGAAGCATGGGAGCCATTTCGCTCTGGGGA
TCTGGCCGAGCAGTTCCTGGATGACTCCACAGCCCTGTACACTTTTGCTGAGAGCTACAAAAAGAAGATAAGCCC
CAAGGAAGAAATTAGCCTGAGCACTGTGGAGTTAAGTGGCACGGTGGTGAACAAGGCTACCTGGCCAAGCAGGG
ACACAAGAGGAAAACTGGAAGGTGCGTCGCTTTGTTCTAAGGAAGGATCCAGCTTTCCTGCATTACTATGACCC
TTCCAAAGAAGAGAACAGGCCAGTGGGTGGGTTTTCTCTTCGTGGTTCACTCGTGTCTGCTCTGGAAGATAATGG
CGTTCCTCACTGGGGTTAAAGGGAATGTCCAGGGAAACCTCTTCAAAGTGATTACTAAGGATGACACACACTATTA
CATTCAGGCCAGCAGCAAGGCTGAGCGAGCCGAGTGGATTGAAGCTATCAAAAAGCTAACATGACAAGGACCTGA
GGGAACCAGGATTCTCCTCCTACCAGATGACACAGACAAGAGTTCCTGGAGAATGGGAGTGTTAAGACTTTTG
ACTTCTTTGTAAGTTTTGTACTGCTTTGGAGAGTGAATGCTGCCAAGAGTTCCTCAGATTACAAACAGCAGTGGT
GCCATTTCTTCCCCATCTTCATGTTACAAACCTGGAAAGGCTAGAACAGCCATTAGGCGTCAGCATCTTGACTT
TTCCCCAGCATCACAAACAGCCATTTCTCGGGCACCAAAGTAGGTTCCCTTTGTTGGAACAATTACACTGGCCA
TGCCATAATGTTGAATAAACTCTCTTCTTATGAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4036

MEDGVLKEGFLVKRGHIVHNWKARWFILRQNTLVYYKLEGGRVTPPKGRILLDGCTITCPCLEYENRPLLIK
TQTSTEFLEACSREERDAWAFEITGAIHAGQPGKVQQLHSLRNSFKLPPHISLHRIVDKMHDSTGIRSSPNME
QGSTYKKTFLGSSLVDWLISNSFTASRLEAVTLASMLMEENFLRPVGVRSMGAIRSGDLAEQFLDDSTALYTFAE
SYKKKISPKEEISLSTVELSGTVVKQGYLAKQGHKRKNWKVRRFVLRKDP AFLHYDPSKEENRPVGGFSLRGSL
VSALEDNGVPTGVKGNVQGNLFKVITKDDTHYYIQASSKAERAEWIEAIKKLT

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FIGURE 4037

GCTGGAGCATCCCGCTCTGGTGCCGCTGCAGCCGGCAGAGATGGTTGAGCTCATGTTCCCGCTGTTGCTCCTCCT
TCTGCCCTTTCCTTCTGTATATGGCTGCGCCCCAAATCAGGAAAATGCTGTCCAGTGGGGTGTGTACATCAACTGT
TCAGCTTTCCTGGGAAAGTAGTTTGTGGTCACAGGAGCTAATACAGGTATCGGGAAGGAGACAGCCAAAGAGCTGGC
TCAGAGAGGAGCTCGAGTATATTTAGCTTGCCGGGATGTGGAAAAGGGGAATTGGTGGCCAAAGAGATCCAGAC
CACGACAGGGAACCAGCAGGTGTTGGTGCGGAACTGGACCTGTCTGATACTAAGTCTATTTCGAGCTTTTGCTAA
GGGCTTCTTAGCTGAGGAAAAGCACCTCCACGTTTGTATCAACAATGCAGGAGTGATGATGTGTCCGTA CTGAA
GACAGCAGATGGCTTTGAGATGCACATAGGAGTCAACCACTGGGGTCACTTCCTCCTAACCCATCTGCTGCTAGA
GAACTAAAGGAATCAGCCCCATCAAGGATAGTAAATGTGTCTTCCCTCGCACATCACCTGGGAAGGATCCACTT
CCATAACCTGCAGGGCGAGAAATTCTACAATGCAGGCCCTGGCCTACTGTACAGCAAGCTAGCCAACATCCTCTT
CACCCAGGAACCTGGCCCGGAGACTAAAAGGCTCTGGCGTTACGACGTATTCTGTACACCCTGGCACAGTCCAATC
TGAACCTGGTTCGGCACTCATCTTTCATGAGATGGATGTGGTGGCTTTTCTCCTTTTTCATCAAGACTCCTCAGCA
GGGAGCCCAGACCAGCCTGCCTGTGCTTAACAGAAAGTCTTGAGATTCTAAGTGGGAATCATTTAGTGACTG
TCATGTGGCATGGGTGTCTGTCCAAGCTCGTAATGAGACTATAGCAAGGCGGCTGTGGGACGTCAGTTGTGACCT
GCTGGGCCTCCCAATAGACTAACAGGCAGTGCCAGTTGGACCCAAGAGAAGACTGCAGCAGACTACACAGTACTT
CTTGTCAAAATGATTCTCCTTCAAGGTTTCAAACCTTTAGCACAAAGAGAGCAAAACCTTCCAGCCTTGCCCTG
CTTGGTGTCCAGTTAAACTCAGTGTACTGCCAGATTCTGTCTAAATGTCTGTATGTCCAGATTTACTTTGCTTC
TGTTACTGCCAGAGTTACTAGAGATATCATAATAGGATAAGAAGACCCTCATATGACCTGCACAGCTCATTTTCC
TTCTGAAAGAACTACTACCTAGGAGAATCTAAGCTATAGCAGGGATGATTTATGCAAAATTTGAAGTACTTCTT
TGTTTACAATTCAGTTCTCTCCCAACCAACAGTCTTCACTTCAAGAGGGCCCACTGCAACCTCAGCTTAACATG
AATAACAAAGACTGGCTCAGGAGCAGGGCTTGCCAGGCATGGTGGATCACCGGAGGTCAGTAGTTCAAGACCAG
CCTGGCCAACATGGTGAACCCACCTCTACTAAAAATGTGTATATCTTTGTGTGTCTTCTGTGTTATGTGTGC
CAAGGGAGTATTTTCACAAAGTTCAAACAGCCACAATAATCAGAGATGGAGCAAACCAAGTGCCATCCAGTCTTT
ATGCAAAATGAAATGCTGCAAAGGGAAGCAGATTCTGTATATGTTGGTAACCTACCCACCAAGAGCACATGGGTAGC
AGGGAAGAAGTAAAAAAGAGAAGGAGAATACTGGAAGATAATGCACAAAATGAAGGGACTAGTTAAGGATTAAC
TAGCCCTTTAAGGATTAAGTAGTTAAGGATTAATAGCAAAAGATATTAAATATGCTAACATAGCTATGGAGGAAT
TGAGGGCAAGCACCCAGGACTGATGAGGTCTTAACAAAAACCAAGTGTGGCAAAAAAAAAAAAAAAAAAAAAA
AAAAATCCTAAAAACAAACAAACAAAAAACAATTCTTCATTAGAAAAATTATCTTAGGGACTGATATTGGTA
ATTATGGTCAATTTAATAATATTTTGGGGCATTTCTTACATTGTCTTGACAAGATTAAATGTCTGTGCCAAAA
TTTTGTATTTTATTTGGAGACTTCTTATCAAAGTAATGCTGCCAAAGGAAGTCTAAGGAATTAGTAGTGTCCC
ATCACTTGTTTGGAGTGTGCTATTCTAAAAGATTTTGATTTCTTGGAAATGACAATTATATTTTAACTTTGGTGGG
GGAAAGAGTTATAGGACCACAGTCTTCACTTCTGATACTTGTAATAATCTTTTATTGCACTTGTTTTGACCAT
TAAGCTATATGTTTAGAAATGGTCATTTTACGGAAAAATTAGAAAAATTCTGATAATAGTGAGAATAAATGAAT
TAATGTTTTACTTAATTTATATTGAAGTGTCAATGACAAATAAAAAATCTTTTTGATTATTTTTTGTTCATTT
ACCAGAATAAAAACTAAGAATTAAAGTTTGATTACAGTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4038

MVELMFLLLLLLPFLLYMAAPQIRKMLSSGVCTSTVQLPGKVVVVTGANTGIGKETAKELAQRGARVYLACRDV
EKGELVAKEIQTTTGNQQVLVRKLDLSDTKSIRAFAGFLAEKHLHVLINNAGVMMCPYSKTADGFEMHIGVNH
LGHFLLTHLLLEKLKESAPSRIVNVSSLAHHLGRIHFHNLQGEKFYNAGLAYCHSKLANILFTQELARRLKSGV
TTYSVHPGTVQSELVRHSSFMRWMWWLFSFFIKTPQQAQTSLHCALTEGLEILSGNHFSDCHVAWVSVQARNET
IARRLWDVSCDLLGLPID

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FIGURE 4039

GAAGCCATAGTCGGCGAGCAACGCTGGAGCATCCCGCTCTGGTGCCGCTGCAGCCGGCAGAGATGGTTGAGCTCA
TGTTCCCGCTGTTGCTCCTCCTTCTGCCCTTCCTTCTGTATATGGCTGCGCCCCAAATCAGGTCTGTGCAAATGT
ATTGCCCTTCTCTTGAGAATTCTTGTGCGGGGCGGGAGGGAAACATAGAATCCCCACCAAAGCTTTCTTGAAAA
CTCCCCGCGGGGGGCTCCAAGATGGCGGAGCCAGAGTTCGGTGGGTGGAGGCGAGGTCCAGCTGTCTCTGGGTG
CCAGGAGGACACCCGAGACCCAGGCGGTGAGAAAGGGCGGCAGTCCGGGGCACACTGCTTTTCCCTGGCCTGTT
TTTCTTTTGTCTAAGCACCCCTGATTCTGGCTCCAGGGAATCCCGAGGGTAAGGCTACCTCAAACGCTTGAGTT
TCGGACTCTTCAATGGGATATGGCCCCGACGCTGTTTTCCCTTATTCCCCACGCTTAAACAGCCTTCGAGGTA
CAAAGGAGCGATTCCACATTTGCCCCCTGAAACTGATAGCAATCGTAACATCTGCGGCCCCATCCTTGCTCTCT
CGTTGCTGTTACAATCGCTTGTTCTGTGGGCGGATGTTGTAAAGGAGAAAAAGTGAAGGAAGAGTGTGTTGGTTA
TGAGCTCTATCCTGCCTTGCGAGCAGGAGCACGGGGGATCTGAGTTAGGAGCTAGGGTACTGGGGCGGTGAGGGC
TGGGAGAATGGTGGGAAGGTATTGACCAGGTGATAGATCAATCAGCCCAAGGCTGGCCAAGTGCCCCAGTGAATC
AGCAGCGGGCTGTAAACCGGCAGCCTGCTTATTGGTTCTAAGTAAATCACCAGTGGTGACGGACCAGTGACTGA
ATAGACAGACACACTCCTTCCCCAGGTGGGCGGTCTTAGTCCCAATAGAACTTGAAGCCAGGCCAGATCACAGTC
ATTTCTTACCACAGTCACCTACTTTCCTTCTTTATTTTTATTTTCTCTTCTCTGGTGCCCCCTCTTCCAGT
TATATTTTTTCTGCCTTCTGAACACTCAGTTCTCCCACTCTAGGCACACATGGTTTCTCACACTCAGATGAAAA
CACTGCTTTTTATCTTTTTTCTACTACAAGATCCTCTTATCCACATAGAATCTCAATGAAAAGTTGAACCAGAAC
TGAAAATAGTGCTCATACCCAGAGGGATTTTTCTGGAAAAAATAATATATGTGTGTATATATATATATATA
TGTGTGTGTGTATATATATATATGTGTGTGTGTGTATATATATATATATATATATATATATATATATATATA
CCAATCAGCAGGGTTATGGGAGTCGGGCCAGAGCTGGACTTTTATAGTTGTCTCTTTCATTCTGCTGGTTAAG
GAGAAGAAAGAACTAAGTACAGGTCCTACTAAGTTGTCACTCCTGGAGCTACATACAGTAAGGGGATGTGGGAAA
CAGCCTAGAGGCTTGTTTTCTGAGGAGGGAGGTGATGGTTTGTGGGGACCATGAGTTAATCTGCCTCCCTGTCAG
CATTTTCGCACTATGCAGGTAGCTTCAATGGCTAAGAGTATGTACCTTGCAATTCCAAGTTCAATGAAAAGGCT
GAAATGCTCTTTAAGAATGCATCTCCTGGTCAACAGATTGTTTTAACCAGAGTCCCAACATTGCCAAGAAGAGAA
TAGGCCAGTCTGAGAACCACCAATCTGTGTTTGTGCATTCAATTTGGAAAAGGCAATATAGTATAGTACTTA
GAAACAAGCACTCTAGGCTGGGCTTGGTGACTCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGCGGA
TCACCTGAGGTCAGGAGTTCGAGACCATCCTGGCCAGCGTGGTGAAACCCTGTCTCTACTAAAAATACAAAATT
AGCTGGGCGTGGTGGCGCATGGGTGAGGGGGTGAGGGATGAGAATCGCTTGAACTGGGAGATGGGGGTTGCAGT
GGAGGTGGAGGTTGCAGTGAGCCGAGATCACACCATTGCACTCCAGCCTGGGCAACAAGAGCAAACTCTGTCTC

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FIGURE 4040

CGCTGTGCGCCGCCAGTAGCAGCCTTCGCCAGCAGCGCCGCGGCGGAACCGGGCGCAGGGGAGCGAGCCCCGGCCCC
GCCAGCCCAGCCCAGCCCAGCCCTACTCCCTCCCCACGCCAGGGCAGCAGCCGTTGCTCAGAGAGAAGGTGGAGG
AAGAAATCCAGACCCTAGCACGCGCGCACCATCATGGACCATTATGATTCTCAGCAAACCAACGATTACATGCAG
CCAGAAGAGGACTGGGACCGGGACCTGCTCCTGGACCCGCGCTGGGAGAAGCAGCAGAGAAAGACATTACCGGCA
TGGTGTAACTCCCACCTCCGGAAGGCGGGGACACAGATCGAGAACATCGAAGAGGACTTCCGGGATGGCCTGAAG
CTCATGCTGCTGCTGGAGGTCTCTCAGGTGAACGCTTGGCCAAGCCAGAGCGAGGCAAGATGAGAGTGCACAAG
ATCTCCAACGTCAACAAGGCCCTGGATTTTCATAGCCAGCAAAGGCGTCAAACCTGGTGTCCATCGGAGCCGAAGAA
ATCGTGGATGGGAATGTGAAGATGACCCTGGGCATGATCTGGACCATCATCCTGCGCTTTGCCATCCAGGACATC
TCCGTGGAAGAGACTTCAGCCAAGGAAGGGCTGCTCCTGTGGTGTGAGAGAAAGACAGCCCCCTTACAAAAATGTC
AACATCCAGAACTTCCACATAAGCTGGAAGGATGGCCTCGGCTTCTGTGCTTTGATCCACCGACACCGGCCCGAG
CTGATTGACTACGGGAAGCTGCGGAAGGATGATCCACTCACAATCTGAATACGGCTTTTGACGTGGCAGAGAAG
TACCTGGACATCCCCAAGATGCTGGATGCCGAAGACATCGTTGGAAC TGCCGACCGGATGAGAAAAGCCATCATG
ACTTACGTGTCTAGCTTCTACCACGCCTTCTCTGGAGCCAGAAAGGCGGAGACAGCAGCCAATCGCATCTGCAAG
GTGTTGGCCGTCAACCAGGAGAACGAGCAGCTTATGGAAGACTACGAGAAGCTGGCCAGTGATCTGTTGGAGTGG
ATCCGCCGCACAATCCCGTGGCTGGAGAACCGGGTGCCCGAGAACACCATGCATGCCATGCAACAGAAGCTGGAG
GACTTCCGGGACTACCGGCGCCTGCACAAGCCGCCAAGGTGCAGGAGAAGTGCCAGCTGGAGATCAACTTCAAC
ACGCTGCAGACCAAGCTGCGGCTCAGCAACCGGCTGCCCTTCATGCCCTCTGAGGGCAGGATGGTCTCGGACATC
AACATGCTGGGGCTGCCTGGAGCAGGTGGAGAAGGGCTATGAGGAGTGGTTGCTGAATGAGATCCGGAGGCTG
GAGCGACTGGACCACCTGGCAGAGAAGTTCGGGCGAGAAGGCTCCATCCACGAGGCTGGACTGACGGCAAAGAG
GCCATGCTGCGACAGAAGGACTATGAGACCGCCACCCTCTCGGAGATCAAGGCCCTGCTCAAGAAGCATGAGGCC
TTCGAGAGTGACCTGGCTGCCACCAGGACCGTGTGGAGCAGATTGCCGCCATCGCACAGGAGCTCAATGAGCTG
GACTATTATGACTCACCAGTGTCAACGCCCCTTGCCAAAAGATCTGTGACCAGTGGGACAATCTGGGGGCCCTA
ACTCAGAAGCGAAGGGAAGCTCTGGAGCGGACCGAGAACTGCTGGAGACCATTGACCAGCTGTACTTGGAGTAT
GCCAAGCGGGCTGCACCCTTCAACAACCTGGATGGAGGGGGCCATGGAGGACCTGCAGGACACCTTCATTGTGCAC
ACCATTGAGGAGATCCAGGGAAGTACCACAGCCCATGAGCAGTTCAAGGCCACCCTCCCTGATGCCGACAAGGAG
CGCCTGGCCATCCTGGGCATCCACAATGAGGTGTCCAAGATTGTCCAGACCTACCACGTCAATATGGCGGGCACC
AACCCTTACACAACCATCACGCTCAGGAGATCAATGGCAAATGGGACCAGTGGGCGAGCTGGTGCCTCGGAGG
GACCAAGCTCTGACGGAGGAGCATGCCGACAGCAGACAATGAGAGGCTACGCAAGCAGTTTGGAGCCCAGGCC
AATGTCATCGGGCCCTGGATCCAGACCAAGATGGAGGAGATCGGGAGGATCTCCATTGAGATGCATGGGACCCTG
GAGGACCAGCTCAGCCACCTGCGGCAGTATGAGAAGAGCATCGTCAACTACAAGCCAAAGATTGATCAGCTGGAG
GGCGACCACAGCTCATCCAGGAGGCGCTCATCTTCGACAACAAGCACACCAACTACCCATGGAGCACATCCGT
GTGGGCTGGGAGCAGCTGCTCACCACCATCGCCAGGACCATCAATGAGGTAGAGATAGAGAACCAGATCCTGACCCGGGAT
GCCAAGGGCATCAGCCAGGAGCAGATGAATGAGTTCCGGGCTCCTTCAACCACCTTTGACCGGGATCACTCCGGC
ACACTGGGTCCCGAGGAGTTCAAAGCCTGCCTCATCAGCTTGGGTTATGATATTGGCAACGACCCCCAGGGAGAA
GCAGAATTTGCCCCGATCATGAGCATTGTGGACCCCAACCGCTGGGGGTAGTGACATTCCAGGCCTTCATTGAC
TTCATGTCCCGGAGACAGCCGACACAGATACAGCAGACCAAGTCATGGCTTCCTTCAAGATCCTGGCTGGGGAC
AAGAACTACATTACCATGGACGAGCTGCGCCGCGAGCTGCCACCCGACCAGGCTGAGTACTGCATCGCGCGGATG
GCCCCCTACACCGGCCCCGACTCCGTGCCAGGTGCTCTGGACTACATGTCTTCTCCACGGCGCTGTACGGCGAG
AGTGACCTCTAAATCCACCCCGCCCGGCCCTCGTCTTGTGCGCCGTGCCCTGCCTTGACCTCCGCGCTCGCC
CATCTCCTGCCTGGGTTTCGGTTTCAGCTCCCAGCCTCCACCCGGGTGAGCTGGGGCCACGTGGCATCGATCCTC
CCTGCCCGCGAAGTGACAGTTTACAAAATTATTTTCTGCAAAAAAGAAAAAAGTTACGTTAAAAACCAAAAA
CTACATATTTTATTATAGAAAAAGTATTTTCTCCACCAGACAAATGGAAGAAAGAGGAAAGATTAATATTT
GCACCGAAATGTCTTGTGTTTGTGCGACATAGGAAAATAACCAAGCACAAAGTTATATTCCATCCTTTTTACTGA
TTTTTTTTTCTTCTATCTGTTCCATCTGCTGTATTCTTTCTCCAATCTCATGTCCATTTTGGTGTGGGAGTCGG
GGTAGGGGTACTCTTGTCAAAGGCACATTGGTGCCTGTGTGTTTGTAGCTCACTTGTCATGAAAATATTTT
ATGATATTAAAGAAAATCTTTTG

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FIGURE 4041

MDHYDSQQTNDYMQPEEDWDRDLLLDP AWEKQQRKFTTAWCNSHLRKAGTQIENIEEDFRDGLKMLLLEVISGE
RLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEIIVDGNVKMTLGMWTIILRF AIQDISVEETS AKEGL
LLWCQRKTAPYKNVNIQNFHISWKDGLGFCALIHRRPELIDYGKLRKDDPLTNLNTAFDVAEKYLDIPKMLDAE
DIVGTARPDEKAIMTYVSSFYHAFSGAQKAETAANRICKVLAVNQENEQLMEDYEKCLASDILLEWIRRTIPWLENR
VPENTMHAMQQKLEDFRDYRRLHKPPKVQEKQLEINFNTLQTKLRLSNRPAFMPSEGRMVSDINNAWGCLEQVE
KGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRQKDYETATLSEIKALLKKHEAFESDLAAHQDR
VEQIAAIAQELNELDYDSPSVNARCQKICDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWM
EGAMEDLQDTFIVHTIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVMAGTNPYTTITPQEI
NGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIEMHGTLEDQLSHLRQYE
KSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMNE
FRASFNHFD RDHSGTLGPEEFKACLISLGYDIGNDPQGEAEFARIMSIVDPNRLGVVTFQAFIDFMSRETADTDT
ADQVMASFKILAGDKNYITMDELRRRELPPDQAEYCIARMAPYTGPDSPGALDYMSFSTALYGESDL

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FIGURE 4042

GCCTGCTGCCGCCTGGGCCCCGCCGAGCGGAGCTAGCGCCGCGCGCAGAGCACACGCTCGCGCTCCAGCTCCCCCT
CCTGCGCGGTTTCATGACTGTGTCCCCTGACCGCAGCCTCTGCGAGCCCCCGCCGAGGACCACGGCCCCGCTCCCC
GCCGCCGCGAGGGCCCCGAGCGAAGGAAGGAAGGGAGGCGCGCTGTGCGCCCCGCGAGCCCCGGAACCCCCGCTC
GCTGCCGGCTGCCAGCCTGGCTGGCACCATGCTGCCCGCGCGCTGCGCCCCGCTGCTCACGCCCCACTTGCTGC
TGGTGTGGTGCAGCTGTCCCCTGCTCGCGGCCACCGCACCACAGGCCCCAGGTTTCTAATAAGTGACCGTGACC
CACAGTGCAACCTCCACTGCTCCAGGACTCAACCCAAACCCATCTGTGCCTCTGATGGCAGGTCTTACGAGTCCA
TGTGTGAGTACCAGCGAGCCAAGTGCCGAGACCCGACCCTGGGCGTGGTGATCGAGGTAGATGCAAAGATGCTG
GCCAGAGCAAGTGTCGCCTGGAGCGGGCTCAAGCCCTGGAGCAAGCCAAGAAGCCTCAGGAAGCTGTGTTTTGTCC
CAGAGTGTGGCGAGGATGGCTCCTTTACCCAGGTGCAGTGCCATACTTACACTGGGTACTGCTGGTGTGTACCCC
CGGATGGGAAGCCCATCAGTGGCTCTTCTGTGCAGATAAACTCCTGTATGTTTCAGGTTTCAGTCACCGACAAGC
CCTTGAGCCAGGGTAACCTCAGGAAGGAAAGATGACGGGTCTAAGCCGACACCCACGATGGAGACCCAGCCGGTGT
TCGATGGAGATGAAATCACAGCCCCAACTCTATGGATTAAACACTTGGTGATCAAGGACTCCAAACTGAACAACA
CCAACATAAGAAATTACAGAGAAAGTCTATTCTGTGACCGAGGAGGCAGAGTGCCCTGGAAGAGGGCCAGCAGA
ATCCCCGTGAGGGTATTGTATCCCTGAATGTGCCCTGGGGGACTCTATAAGCCAGTGCAATGCCACCACTCCA
CTGGCTACTGCTGGTGTGTGCTGGTGGACACAGGGCGCCCGCTGCCTGGGACCTCCACACGCTACGTGATGCCCA
GTTGTGAGAGCGACGCCAGGGCCAAGACTACAGAGGCGGATGACCCCTTCAAGGACAGGGAGCTACCAGGCTGTC
CAGAAGGGAAGAAAATGGAGTTTATCACCAGCCTACTGGATGCTCTCACCCTGACATGGTTTCAGGCCATTAACT
CAGCAGCGCCACTGGAGGTGGGAGGTTCTCAGAGCCAGACCCAGCCACACCCCTGGAGGAGCGGGTAGTGCAT
GGTATTTACGCCAGCTGGACAGCAATAGCAGCAACGACATTAACAAGCGGGAGATGAAGCCCTTCAAGCGCTACG
TGAAGAAGAAAGCCAAGCCCAAGAAATGTGCCCGCGCTTTCACCGACTACTGTGACCTGAACAAAGACAAGGTCA
TTTCACTGCCTGAGCTGAAGGGCTGCCTGGGTGTTAGCAAAGAAGGACGCTCGTCTTAAGGAGCAGAAAACCCAA
GGGACAGGTGGAGAGTCCAGGGAGGCAGGATGGATCACCAGACACCTAACCTTCAGCGTTGCCCATGGCCCTGCCA
CATCCCGTGTAAACATAAGTGGTGCCACCATGTTTGCACTTTTAATAACTCTTACTTGCGTGTTTTGTTTTGGT
TTCATTTTAAACACCAATATCTAATACCACAGTGGGAAAAGGAAAGGGAAGAAAGACTTTATCTCTCTCTTAT
TGTAAGTTTTTGGATCTGCTACTGACAACTTTTAGAGGGTTTGGGGGGGTGGGGGAGGGTGTTGTTGGGGCCTG
AGAAGAAAGAGATTTATATGCTGTATATAAATATATATGTAAATTGTATAGTTCTTTGTACAGGCATTGGCATT
GCTGTTTTGTTTTATTTCTCTCCCTCTGCCTGCTGTGGGTGGTGGGCACTCTGGACACATAGTCCAGCTTTCTAAAA
TCCAGGACTCTATCCTGGGCCTACTAACTTCTGTTTGGAGACTGACCCCTGTGTATAAAGACGGGAGTCCTGCA
ATTGTACTGCGGACTCCACGAGTTCTTTTCTGGTGGGAGGACTATATTGCCCCATGCCATTAGTTGTCAAAATTG
ATAAGTCACTTGCTCTCGGCCTTGTCAGGGAGGTTGGGCTAAGGAGAGATGGAAGCTGCCCTGGGAGAGGAAG
GGAGTCCAGATCCCATGAATAGCCACACAGGTACCGGCTCTCAGAGGGTCCGTGCATTCTGTCTCTCCGACCC
CCAAAGGGCCAGCATTGGTGGGTGCACCACTATCTTAGTGACCCCTCGGAGCAAATTATCCACAAAGGATTTGCA
TTACGTCACTCGAAACGTTTTTCATCCATGCTTAGCATCTACTCTGTATAACGCATGAGAGGGGAGGCAAAGAAGA
AAAGGACACACGGAAGGGCCTTTAAAAAAGTAGATATTTAATATCTAAGCAGGGGAGGGGACAGGACAGAAAGCC
TGCCTGAGGGGTGCGGTGCCAACAGGGAAACTCTTACCTCCCTGCAAACCTACCAGTGAGGCTCCAGAGACG
CAGCTGTCTCAGTGCCCAGGGGCAGATTGGGTGTGACCTCTCCA

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FIGURE 4043

MLPARCARLLTPHLLLVLVQLSPARGHRTTGPRFLISDRDPQCNLHCSRTQPKPICASDGRSYESMCEYQRAKCR
DPTLGVVHRGRCKDAGQSKCRLERAQALEQAKKPQEAVFVPECGEDGSFTQVQCHTYTGYCWCVTPDGKPI SGSS
VQNKTPVCSGSVTDKPLSQGNSGRKDDGSKPTPTMETQPVFDGDEITAPTLWIKHLVIKDSKLNNTNIRNSEKVY
SCDQERQSALEEAQQNPREGIVIECAPGGLYKPVQCHQSTGYCWCVLVD TGRPLEGTSTRYVMPSCESDARAKT
TEADDPFKDRELPGCPEGKKMEFITSLLDALTTDMVQAINSAAPTGGGRFSEPDPSHTLEERVVHWYFSQLDSNS
SNDINKREMKPFKRYVKKKAKPKKCARRFTDYCDLNKDKVISLPELKGCLGVSKEGRLV

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FIGURE 4044

AAGATGCCGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCCCCAGCTGTCGTGAAGAAGCAGGAGGCT
AAGAAAGTGGTGAATCCCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGCATTGGACAGGACATCCAGCCCCAAAAGA
GACCTCACCCGCTTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGGCAGAGAGCCATCCTCTATAAGCGGCTG
AAAGTGCCTCCTGCGATTAACCAAGTTCACCCAGGCCCTGGACCGCCAAACAGCTACTCAGCTGCTTAAGCTGGCC
CACAAGTACAGGCCAGAGACAAAGCAAGAGAAGAAGCAGAGACTGTTGGCCCGGGCCGAGAAGAAAGCTGCTGGC
AAAGGGGACGTCCCGAAGAAGAGACCACCTGTCCTTCGAGCAGGAGTTAACACTGTCACCACCTTGGTGGAGAAC
AAGAAAGCTCAGCTGGTGGTGATTTTACACGACATGGATCCCATCGAGGGGGAAGGCAAGACTGGGACGTCTAGT
CCACAGGAAGACCTGCACCACTGTCGCCTTCACACAGGTGAACTCAGAAGACAAAGGCGCTTTGGCTAAGCTGGT
GGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCCGCCGTCCTGGGGTGGCAATGTCCTGGGTCC
TAAGTCTGTGGCTCGTATCGCCAAGCGCAAAAAGGCAAAGGCTAAAGAACTTGCCACTAAACTGGGTTAAATGTA
CACTGTTGAGTTTTCTGTACATAAAAATAATTAAATAATACAAATTTTCCTT

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FIGURE 4045

TGGGACAGGCAGCTCCGGGGTCCGCGGTTTCACATCGGAAACAAAACAGCGGCTGGTCTGGAAGGAACCTGAGCT
ACGAGCCGCGGCGGCAGCGGGGCGGCGGGAAGCGTATACCTAATCTGGGAGCCTGCAAGTGACAACAGCCTTTG
CGGTCTTAGACAGCTTGGCCTGGAGGAGAACACATGAAAGAAAGAACCTCAAGAGGCTTTGTTTTCTGTGAAAC
AGTATTTCTATACAGTTGCTCCAATGACAGAGTTACCTGCACCGTTGTCTACTTCCAGAATGCACAGATGTCTG
AGGACAACCACCTGAGCAATACTGTACGTAGCCAGAATGACAATAGAGAACGGCAGGAGCACAACGACAGACGGA
GCCTTGGCCACCCTGAGCCATTATCTAATGGACGACCCAGGGTAACTCCCGGCAGGTGGTGGAGCAAGATGAGG
AAGAAGATGAGGAGCTGACATTGAAATATGGCGCCAAGCATGTGATCATGCTCTTTGTCCCTGTGACTCTCTGCA
TGGTGGTGGTCTGCTGGCTACCATTAAAGTCAGTCAGCTTTTATACCCGGAAGGATGGGCAGCTAATCTATACCCCAT
TCACAGAAGATACCGAGACTGTGGGCCAGAGAGCCCTGCACTCAATTCTGAATGCTGCCATCATGATCAGTGTCA
TTGTTGTATGACTATCCTCCTGGTGGTTCTGTATAAATACAGGTGCTATAAGGTCATCCATGCCTGGCTTATTA
TATCATCTCTATTGTTGCTGTTCTTTTTTTCATTCACTTACTTGGGGGAAGTGTTTAAACCTATAACGTTGCTG
TGGACTACATTACTGTTGCACCTCTGATCTGGAATTTTGGTGTGGTGGGAATGATTTCCATTCACTGGAAAGGTC
CACTTCGACTCCAGCAGGCATATCTCATTATGATTAGTGCCCTCATGGCCCTGGTGTATCAAGTACCTCCCTG
AATGGACTGCGTGGCTCATCTTGGCTGTGATTTCAGTATATGATTTAGTGGCTGTTTTGTGTCCGAAAGGTCCAC
TTCGTATGCTGGTTGAAACAGCTCAGGAGAGAAATGAAACGCTTTTTCCAGCTCTCATTTACTCCTCAACAATGG
TGTGGTTGGTGAATATGGCAGAAGGAGACCCGGAAGCTCAAAGGAGAGTATCCAAAATTCGAAGTATAATGCAG
AAAGCACAGAAAGGGAGTCACAAGACACTGTTGCAGAGAATGATGATGGCGGGTTCAGTGAGGAATGGGAAGCCC
AGAGGGACAGTCATCTAGGGCCTCATCGCTCTACACCTGAGTCACGAGCTGCTGTCCAGGAACCTTCCAGCAGTA
TCCTCGCTGGTGAAGACCCAGAGGAAAGGGGAGTAAACCTGGATTGGGAGATTTCAATTTCTACAGTGTCTG
TTGGTAAAGCCTCAGCAACAGCCAGTGGAGACTGGAACACAACCATAGCCTGTTTCGTAGCCATATTAATTGGTT
TGTGCCCTTACATTATTACTCCTTGCCATTTTCAAGAAAGCATTGCCAGCTCTTCCAATCTCCATCACCTTTGGC
TTGTTTTCTACTTTGCCACAGATTATCTTGTACAGCCTTTTATGGACCAATTAGCATTCCATCAATTTTATATCT
AGCATATTTGCGTTAGAAATCCCATGGATGTTTCTTCTTGTACTATAACAAAATCTGGGGAGGACAAAGGTGATT
TTCCTGTGTCCACATCTAACAAAGTCAAGATTCCCGGCTGGACTTTTGCAGCTTCCTTCCAAGTCTTCTGACCA
CCTTGCACTATTGGACTTTGGAAGGAGGTGCCTATAGAAAACGATTTTGAACATACTTCATCGCAGTGGACTGTG
TCCCTCGGTGCAGAACTACCAGATTTGAGGGACGAGGTCAAGGAGATATGATAGGCCCGGAAGTTGCTGTGCCC
CATCAGCAGCTTGACGCGTGGTCACAGGACGATTTCACTGACACTGCGAACTCTCAGGACTACCGTTACCAAGAG
GTTAGGTGAAGTGGTTTAAACCAAACGGAACCTTTCATCTTAAACTACACGTTGAAAATCAACCAATAATTCTG
TATTAAGTGAATTCTGAACTTTTTCAGGAGGTACTGTGAGGAAGAGCAGGCACCAGCAGCAGAATGGGGAATGGAG
AGGTGGGCAGGGGTTCCAGCTTCCCTTTGATTTTTTGTCTGCAGACTCATCCTTTTTTAAATGAGACTTGTTTTCCC
CTCTCTTTGAGTCAAGTCAAATATGTAGATTGCCTTTGGCAATTCTTCTTCTCAAGCACTGACACTCATTACCGT
CTGTGATTGCCATTTCTTCCCAAGGCCAGTCTGAACCTGAGGTTGCTTTATCCTAAAAGTTTTTAACCTCAGGTTT
CAAATTCAGTAAATTTTGGAAACAGTACAGCTATTTCTCATCAATTCTCTATCATGTTGAAGTCAAATTTGGATT
TTCCACCAAATTTCTGAATTTGTAGACATACTTGTACGCTCAGTTGCCCCAGATGCCTCCTCTGTCTCATTCTTC
TCTCCACACAAGCAGTCTTTTTCTACAGCCAGTAAGGCAGCTCTGTCTGGTAGCAGATGGTCCATTATTCTA
GGGTCTTACTCTTTGTATGATGAAAAGAAATGTGTTATGAATCGGTGCTGTGACGCCCTGCTGTGACACCTTCTCC
ACAGCAAATGAGATGTATGCCCAAAGACGGTAGAATTAAAGAAGAGTAAATGGCTGTTGAAGC

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FIGURE 4046

GGCACGAGGGTAGCTTTCCAACATAAAGTGGAGGTTTCAACACAGGAGACTTTAAGCAAGTTCCAGTGTGTCTAT
ATTTGGTCTGGCTGATCGGCTGGACTCTGGCCTTCCCCGCTCACGTTAGCAGACAGCTCTGCCCTAGTGGGCGCT
TAGCCTGCGACGGCAGCCCGAGAGGATGCTCTAACAAGCTTCTTTCTCCCCACCCCATTCAGTTGTTCTCAGGTC
TGAATTCAAAATGGCCTCATCTCCTGCTGTCTTCGAGCGTCCCGGCTGTACCAATGGAGCCTGAAGAGTTCGGC
GCAGTTCTGGGGTCTCCACAGCTGAGGCAGGTTGGTCAGATCATTAGGGTTCCTGCTCGGATGGCGGCGACGCT
GATCCTGGAGCCTGCGGGCCGCTGCTGCTGGGACGAACCGGTGCGAATCGCCGTGCGCGGCTAGCCCCGGAGCA
GCCGGTCACGCTGCGCGCGTCCCTGCGCGACGAGAAGGGCGCGCTTTTCCAGGCCACGCGCGCTACCGCGCCGA
CACTCTTGGCGAGCTGGACCTGGAGCGCGCGCCCGCGCTGGGCGGCAGCTTCGCGGGCTTGAGCCCCATGGGGCT
GCTCTGGGCCCTTGGAGCCCGAGAAACCTTTGGTGCGGCTGGTGAAGCGCGACGTGCGAACGCCCTTGGCCGTGGA
GCTGGAGGTGCTGGATGGCCACGACCCCGACCCCGGGCGGGCTGCTGTGCCAGACGCGGCACGAGCGCTACTTCCT
CCCGCCCGGGGTGCGGCGCGAGCCGGTGCGCGTGGGCGGGGTGCGAGGCACGCTCTTCTGCCGCCAGAACCTGG
GCCCTTTCCTGGGATTGTGGACATGTTCCGAACTGGAGGTGGCCTGCTGGAGTATCGGGCTAGTCTGCTGGCTGG
GAAGGGTTTTGCTGTGATGGCTCTGGCTTATTATAACTATGAAGACCTCCCAAGACCATGGAGACGCTCCATCT
GGAGTACTTTGAAGAAGCCATGAATACTTGCTCAGTCATCCCGAGGTAAAAGGTCCAGGAGTTGGGCTGCTTGG
AATTTCCAAAGGGGGTGAGCTCTGCCTTTCCATGGCCTCTTTCCTGAAGGGCATCACGGCTGCTGTGTCATCAA
CGGCTCTGTGGCCAATGTTGGGGGAACCTTACGCTACAAGGGCGAGACCCTGCCCCCTGTGGGCGTCAACAGAAA
TCGCATCAAGGTGACCAAAGATGGCTATGCAGACATTGTGGATGTCTGAACAGCCCTTTGGAAGGACCTGACCA
GAAGAGCTTCATTCTGTGGAAAGGGCAGAGAGCACCTTCCTGTTCTGGTAGGTGAGGATGACCACAACCTGGAA
GAGTGAGTTCTATGCTAATGAGGCCTGTAAACGCTTGACGGCCCATGGGAGGAGAAAGCCCCAGATCATCTGTTA
CCCAGAGACAGGGCACTATATTGAGCCTCCTTACTTCCCCCTGTGTCGGGCTTCCCTGCATGCCTTGGTGGGCAG
TCCTATTATCTGGGGAGGGGAGCCCAGGGCTCATGTATGGCTCAGGTGGATGCTTGGAAACAACCTCCAGACTTT
CTTCCACAAACACTTGGGTGGCCACGAGGGGACAATCCCATCAAAAGTGTAAATTTTATTTGATCATGTGGCCTC
TCTGTTGCTAATCTCTCCTGGAAACATCTGCCACATTTAGTGTGTGTATGTGTATTATTCTTTTGTTTTAAATA
ACTAAAGTTTTTTCCCTCATTATTAAATGAATTTACCAGTAAAAAAAAAAAAAAAAAAAA

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FIGURE 4047

MSNKLLSPHPHSVVRSEFKMASSPAVLRASRLYQWSLKSSAQFLGSPQLRQVGQIIRVPARMAATLILEPAGRC
CWDEPVRIAVRGLAPEQPVTLRASLRDEKGALFQAHARYRADTLGELDLERAPALGGSFAGLEPMGILLWALEPEK
PLVRLVKRDVRTPLAVELEVLDGHDPPDGRLLCQTRHERYFLPPGVRREFVRVGRVGRGTLFLPPEPGPFPGIVDM
FGTGGGLLEYRASLLAGKGFVMAALAYNYEDLPKTMETLHLEYFEEAMNYLLSHPEVKGPVGVLGISKGGELC
LSMASFLKGITAAVVINGSVANVGGLTRYKGETLPPVGVNRNRKIKVTKDGYADIVDLNSPLEGPDQKSFIPIVER
AESTFLFLVGQDDHNWKSEFYANEACKRLQAHGRRKPQIICYPETGHYIEPPYFPLCRASLHALVGSPIIWGGEP
RAHVMAQVDAWKQLQTFFHKHLGGHEGTIPSKV

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FIGURE 4048

GGCACGAGGACAGGTGCGCTGACTGGGCTCCTCCCCGGGCCCCGCCCCGACAGGTTTGTCTTGTGACCGCGGGCGG
CCGCTGCTTCTTTCCCGAGCTTGGAACCTTCGTTATCCGCGATGCGTTTCTGGCAGCTACATTCTGCTCCTGGC
GCTCAGCACCGCTGCCCAGGCCGAACCGGTGCAGTTCAAGGACTGCGGTTCTGTGGATGGAGTTATAAAGGAAGT
GAATGTGAGCCCATGCCCCACCCAACCCTGCCAGCTGAGCAAAGGACAGTCTTACAGCGTCAATGTCACCTTCAC
CAGCAATATTCAGTCTAAAAGCAGCAAGGCCGTGGTGCATGGCATCCTGATGGGCGTCCCAGTTCCCTTTCCCAT
TCCTGAGCCTGATGGTTGTAAGAGTGGAATTAAGTGCCTATCCAAAAGACAAGACCTATAGCTACCTGAATAA
ACTACCAGTGAAAAGCGAATATCCCTCTATAAACTGGTGGTGGAGTGGCACTTCAGGATGACAAAAACCAAAG
TCTCTTCTGCTGGGAAATCCCAGTACAGATCGTTTCTCATCTCTAAGTGCCTCATTGAGTTCGGTGCATCTGGCC
AATGAGTCTGCTGAGACTCTTGACAGCACCTCCAGCTCTGCTGCTTCAACAACAGTGACTTGCTCTCCAATGGTA
TCCAGTGATTTCGTTGAAGAGGAGGTGCTCTGTAGCAGAACTGAGCTCCGGGTGGCTGGTTCTCAGTGGTTGTCT
CATGTCTCTTTTTCTGTCTTAGGTGGTTTCATTAAATGCAGCACTTGGTTAGCAGATGTTTAATTTTTTTTTTAA
CAACATTAACCTGTGGCCTCTTTCTACACCTGGAAATTTACTCTTGAATAAATAAAAACTCGTTTGTCTTGTCAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4049

MRFLAATFLLALSTAAQAEVQFKDCGSVDGVIKEVNVSPCPTQPCQLSKGQSYSVNVTFTSNIQSKSSKAVVH
GILMGVPVPFPPIPEPDGCKSGINCPIQKDKTYSYLNKLPVKSEYPSIKLVVEWQLQDDKNQSLFCWEIPVQIVSH
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FIGURE 4050A

GCTACACCTCCTCCAGGAATACCTCCCCCTGGAGTTCCACAAGGGATACCTCCTCAGTTAACAGCAGCCCCAGTT
CCACCAGCCTCCAGTTACAGAGCTCGCAAGTTCCAGAGAAACCTAGACCAGCACTGCTTCCTACTCCTGTGTCT
TTTGGTTCTGCCCCACCGACAACCTTACCATCCTCCGTTGCAATCAGCTGGTCCATCAGAACAAGTGAATTCAAAA
GCTCCTTTGAGCAAGTCTGCTCTGCCATACAGTTTATTCTCATCTGATCAAGGACTTGGGGAGTCTTCAGCTGCT
CCATCTCAGCCAATCACTGCAGTGAAGGACATGCCAGTGAGATCAGGTGGCCTGCTTCAGATCCTCCTAGAAGT
AGTTACTTGGAAAGTCCAAGAGGCCCAAGATTTTGATGGTCCCTCGAAGATTTGAGGATTTAGGGTCAAGGTGTGAA
GGACCGAGACCCAAAGGGCCTCGTTTTGAAGGAAATCGCCCCGATGGGCCAAGACCCAGATATGAAGGTCACCCA
GCAGAGGGCACTAAAAGCAAGTGGGGAATGATTCCCCGGGGGCCAGCATCTCAATTTTATATTACCCCCAGTACA
TCCCTAAGTCTCGACAGAGTGGACCACAGTGGAAAGGCCCAACCCAGCTTTTGGACAGCAGCATCAGCAGCAA
CCTAAGTCACAAGCAGAACCTCTTTTCAAGAAACAAAGAACCATTAGCAGACACCAGTAGTAACCAGCAGAAGAAT
TTTAAAATGCAATCAGCTGCATTTTCCATTGCTGCAGATGTAAAGGATGTCAAGGCGGCTCAGTCAAATGAGAAT
CTAAGCGACTCTCAACAAGAGCCACCTAAAAGTGAAGTCTCGGAAGGGCCCGTAGAGCCCTCTAATTGGGACCAG
AATGTTCAAAGTATGGAGACTCAAATCGACAAAGCCCAAGCTGTTACTCAGCCTGTACCCCTTGCGAATAAGCCT
GTACCTGCTCAATCTACTTTTCTTCAAAAACAGGGGGGATGGAGGGAGGAACAGCAGTAGCAACATCATCATT
ACAGCAGATAATGATTTTAAACCTGTGGGTATTGGTCTACCCCATTCAGAAAAACAACCAAGATAAAGGCCTGCCT
CGGCCAGATAATAGAGATAATAGATTAGAAGGCAATAGAGGCAACAGCTCATCTTACAGAGGTCTGGGCAAAAGC
AGAATGGAAGACACACGGGATAAAGGTCTAGTAAACAGAGGTGCGGGCCAGGCAATCAGTCGAGGGCCAGGATTG
GTCAAGCAAGAAGACTTTCGGGATAAGATGATGGGTAGAAGAGAAGATAGTCGAGAGAAGATGAACAGAGGAGAA
GGTAGCCGGGACAGAGGGTTGGTGAGGCTGGAAGCAGTCGGGAGAAAGTGCCAGGTGGTCTTCAAGGGAGCCAG
GACAGGGGTGCAGCTGGCAGCCGAGAAAGGGGACCACCTCGGAGGGCTGGCAGTCAGGAGAGGGGACCTCTTGA
AGGGCTGGGAGTAGAGAGAGAATACCACCCGAAGAGCTGGGAGCAGGGAGAGAGGACCACCTCGAGGGCCTGGC
AGTCGAGAAAGGGGACTGGGAAGATCAGATTTTGGTCGTGATAGAGGTCCATTCAGACCAGAACCAGGAGATGGT
GGGGA AAAAATGTATCCATATCACCGGATGAGCCTCCTAGGGCTCCATGGAACCATGGAGAAGAGCGAGGGCAT
GAAGAGTTTCCATTAGATGGTAGAAATGCTCCAATGGAACGAGAAAGACTCGATGACTGGGATAGAGAGAGATAC
TGGAGAGAATGTGAACGTGACTATCAAGATGATACTAGAGCTCTATAACAGAGAGGACAGGTTCTCAGCACCA
CCATCTCGGTCTCATGATGGAGATAGGCGAGGCCCTTGGTGGGATGATTGGGAGAGAGACCAGGATATGGATGAG
GACTACAATAGGGAAATGGAAAGGGACATGGACAGGGATGTGGATCGGATTTCAAGACCTATGGATATGTATGAT
AGAAGTTTGGATAATGAGTGGGACAGAGATTATGGGAGACCACTGGATGAACAAGAATCACAGTTTCGTGAACGG
GATATTCCATCTCTTCCACCTTTACCGCCCCCTCCACCTCTTCCACCTTTGGATAGATATCGGGATGATAGATGG
AGAGAAGAAAGAAATCGAGAGCATGGGTATGATCGAGATTTCCGTGATAGGGGTGAGTTGAGGATTCGAGAGTAT
CCAGAAAGAGGAGATACATGGCGGGAAGAGCAGATTATGTTTCTGACAGAATGGATGGGAAAGAGAACGGTTG
TCAGACAGATGGTACCCATCTGATGTGGATAGACATTTCCCCATGGCGGAACATATGCCCTCCTCACATCATTCC
TCAGAAATGATGGGGTCCGATGCAAGCTTAGACTCTGACCAAGGCCTTGGAGGGGTAATGGTTCTCAGTCAGAGG
CAGCATGAAATCATTTTGAAGCTGCACAAGAACTGAAAATGCTTCGGGAACAGAAAGAACAGCTTCAAAAGATG
AAAGACTTCGGGTCTGAGCCACAGATGGCTGACCATCTACCACCTCAGGAATCAAGATTGCAGAATACATCTTCA
AGACCTGGAATGTATCCGCCTCCAGGGTCGTATAGACCTCCCCCTCCTATGGGCAAACCACCAGGTTCAATTGTA
AGACCCTCTGCTCCACCAGCAAGATCATCTGTTCTGTGACCAGGCCACCTGTCCCAATACCACCACCTCCACCT
CCTCCACCTCTACCTCCTCCTCCTCCAGTGATAAAGCCACAAACTTCAGCTGTAGAACAGGAACGATGGGATGAA
GATTCTTTCTATGGGCTCTGGGATACAAATGATGAACAAGGACTGAATTCAGAATTTAAGTCAGAAACTGCAGCA
ATTCCATCTGCTCCAGTATTACCACCCCCACCTGTTCACTCTTCCATTCCCCCTCCTGGCCCAGTGCCTATGGGT
ATGCCACCAATGTCCAAGCCACCACAGTACAACAGACTGTTGATTATGGCCATGGCCGAGATATATCCACTAAT
AAAGTTGAACAGATACCTTATGGAGAAAGAATAACTCTACGCCAGATCCACTACCTGAAAGATCAACTTTTGAG
ACAGAGCATGCAGGCCAACGTGATCGTTATGATAGAGAAAGAGATCGTGAGCCTTATTTTGATCGTCAAAGTAAT
GTCATAGCAGATCATCGAGATTTTAAAGGGATCGTGAGACACATAGAGATCGAGACCGGGATCGTGGTGTATT
GACTATGACCGGGATCGATTTTACAGAGAACGCCGACCCGAGATGATAGAGCTCAGTCATATCGAGACAAAAA
GACCATTCTCATCCAGAAGAGGGGGTTTTGATAGGCCATCCTATGACCGGAAGTCTGACCGACCACTATGAA
GGACCATCCATGTTTGGAGGAGAACGAAGGACTTATCCTGAGGAGCGAATGCCTCTGCCAGCTCCTTCACTGAGC
CACCAGCCTCCTCCAGCTCCACGAGTCGAGAAGAAGCCTGAATCAAAGAATGTGGACGATATTTTGAACCACCG

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FIGURE 4050B

GGCCGGGAGAGCAGACCTGAGAGAATTGTTGTTATAATGAGAGGATTACCTGGCAGTGGAAAGACACATGTTGCA
AAACTTATTCGAGATAAGGAGGTAGAATTTGGAGGACCTGCACCCAGAGTTCTAAGCCTGGATGATTACTTCATC
ACTGAAGTGGAAAAAGAAGAAAAAGATCCAGATTCTGGAAGAAAGTGAAAAAGAAGGTAATGGAATATGAATAT
GAAGCTGAGATGGAGGAGACTTACCGCACCAGCATGTTCAAAACTTTCAAAAAGACTCTGGATGATGGCTTTTTT
CCCTTCATCATCCTGGATGCCATCAATGACAGAGTTAGGCATTTTGACCAGTTTTGGAGTGCAGCAAAAACCAAG
GGATTTGAGGTATATTTGGCTGAAATGAGTGCAGATAACCAGACTTGTGGCAAGAGAAATATTCATGGAAGAAAG
CTTAAAGAAATAAATAAGATGGCTGATCACTGGGAACTGCACCTCGTCACATGATGCGTCTAGATATTCGTTCT
TTGCTGCAAGATGCTGCTATTGAAGAGGTAGAGATGGAAGATTTTGATGCAAAATATCGAAGAACAGAAAGAAGAA
AAGAAAGATGCAGAGGAAGAGGAAAGCGAACTGGTAGGAGACAGACCAACCACTTTGAACAGTGTCTCTTTATTA
AAATTCTTAAAGAAGGTTTAAATTCAGATCTGTGGTTAGACAACACTACTGTTGATATACACTTTAGTGGTAAAAGT
TTCCATAATCATCTTCAAGGAGACTTTTGGATACTCTTTATTTTTCCCCAGACCAAAGAACCCTCTAATGTGGT
GTTAAGAGAAAGTTTTAACAGAGTGCTAAGAAACTTACCCTTGTAATCATCTATTTGTGGGTGGTTTTAGGGGAG
TATACCTTTTAAAGAAAATCAATTACATATGAAAGGGCATTCTTACATTCCAGCAGATATGTGGCACAGCCTACCC
AACATATGCATAATTGTCTCTTCTTTGCTACAAGATCTCCAAATTTGAGTTTCTGTCAACAGAGGCAGAAGAAGT
TATTGAATGGGGAGGCAGAGGGTTGCCACTGGCTGCTAGATTTGTTCTTCTGCATTTTATCCTAAGTGACGGGGA
AAAATTAAATGACTGTGTAGGCAATGGATTTTGCTCAGGCTGATTAGAGGCTTACATAGTGTGAGTTTAAAGTTT
CTGTGTACCTAATGTAAATGCTTTTCGATCACACCTCTGTAGAGATGTTTGCCTTTCCCTGTCATTCAAGAATAT
GCGACCTATAGAGTTACGTTGACTTTTTAGTGTCTTACTGAAGTACAGAGATTAGCAATGCCTTGGAATAGTGTG
CTTTTTAAATCCAGAATATTACTCGGTTTATTTAATACTTGAGCCCTTGCTAAAGTTGCTCCTCATATTCTTTTG
AAAATGTACAAAATGAGAACTCTGATTCCTACCCCTAGAGTATACAGAATCTCCAGGGAGTGGTCCCATCGAAC
CCGTGTGTGATATAGAGGACTCTTGATAAAAAGTGTGTTTATATAAAGATGGTGTCAACCTCTACATTCCAAGAT
TTCAAATGTGGATTAAAAAATAAGTTTTAAAGT

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FIGURE 4051

MPVRSGLLPDPPRSSYLESPRGPRFDGPRRFEDLGSRCGPRPKGPRFEGNRPDGPRPRYEGHPAEGTKSKWGM
IPRGPASQFYITPSTLSLSPRQSGPQWKGPAPAFGQQHQQPKSQAEPLSGNKEPLADTSSNQKNFKMQSAAFSI
AADVKDVKAAQSNENLSDSQEPPKSEVSEGPVEPSNWDQNVQSMETQIDKAQAVTQPVPLANKPVPAQSTFPFSK
TGGMEGGTAVATSSLTADNDFKPVGIGLPHSENNQDKGLPRPDNRDRNRLEGNRGNSSSYRGPQGSRMEDTRDKGL
VNRGRGQAISRGPGLVKQEDFRDKMMGRREDSREKMNREGESRDRGLVRPGSSREKVPGGLOQSQDRGAAGSRER
GPPRRAGSQERGPLRRAGSRERIPRRAGSRERGPPRPGSGRERGLGRSDFGRDRGPFPRPEPGDGGEKMPYHRD
EPPRAPWNHGEERGHEEFPLDGRNAPMERERLDDWDRERYWRECERDYQDDTLELYNREDRFSAPPSRSHDGD RR
GPWWDDWERDQDMDDEDYNREMERDMDRDVDRI SRPMDMYDRSLDNEWDRDYGRPLDEQESQFRERDIPSLPPLPP
LPPLPPLDRYRDDRWREERNREHG YDRDFRDRGELRIREYPERGDTWREKRDYVPDRMDWERERLSDRWYPSDVD
RHSPMAEHMPSSHSSEMMGSDASLSDSQGLGGVMVLSQRQHEI ILKAAQELKMLREQKEQLQKMKDFGSEPQMA
DHLPPQESRLQNTSSRPGMYPPPGSYRPPPPMGKPPGSIVRPSAPPARSSVPVTRPPVP IPPPPPPPPPLPPPPPV
IKPQTSAVEQERWDEDSFYGLWDTNDEQGLNSEFKSETAAIP SAPVLPPPPVHSSIPPPGPVPMGMPMSKPPPV
QQTVDYGHGRDISTNKVEQIPYGERITLRPDPLPERSTFETEHAGQRDRYDRERDREPYFDRQSNVIADHRDFKR
DRETHRDRDRDRGVIDYDRDRFDRERRPRDDRAQSYRDKKDHSSRRGGFDRPSYDRKSDRPVYEGPSMFGGERR
TYPEERMPLPAPSLSHQPPAPRVEKKPESKNVDDILKPPGRESRPERIVVIMRGLPGSGKTHVAKLIRDKEVEF
GGPAPRVLSDDYFITEVEKEEKDPDSGKKVKKKMEYEYEAEMEETYRTSMFKTFKKTLDGFFPFI ILDAIND
RVRHFDQFWSAAKTGFEVYLAEMSADNQTGKRNIHGRKLKEINKMADHWETAPRHMMRLDIRSLQDAAIEEV
EMEDFDANIEEQKEEKDAEEEESELGYIPKSKWEMDTSEAKLDKLDGLRTGTKRKRDEWAIASRMEDYLQLPDD
YDTRASEPGKKRVRWADLEKKDADRKRAIGFVVGQTDWEKITDESGHLAEKALNRTKYI

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FIGURE 4052

GGCACGAGGCTGCTGTCTGCGGAGGAACTGCATCGACGGACGGCCGCCAGCTACGGGAGGACCTGGAGTGGCA
CTGGGCGCCCCGACGGACCATCCCCGGGACCCGCCTGCCCCCGGCGCCCCGCCCCGCGGGCCGCTCCCCGTGCG
GTTCCCCAGCCACAGCCTTACCTACGGGCTCCTGACTCCGCAAGGCTTCCAGAAGATGCTCGAACCACCGGCCGG
GGCCTCGGGGCAGCAGTGAGGGAGGCGTCCAGCCCCCACTCAGCTCTTCTCCTCCTGTGCCAGGGGCTCCCCGG
GGGATGAGCATGGTGGTTTTCCCTCGGAGCCCCCTGGCTCGGGACGTCTGAGAAGATGCCGGTTCATGAGGCTGTT
CCCTTGCTTCCCTGCAGCTCCTGGCCGGGCTGGCGCTGCCTGCTGTGCCCCCCCAGCAGTGGGCCTTGTCTGCTGG
GAACGGCTCGTCAGAGGTGGAAGTGGTACCCTTCCAGGAAGTGTGGGGCCCGCAGCTACTGCCGGGCGCTGGAGAG
GCTGGTGGACGTCTGTGCCGAGTACCCAGCGAGGTGGAGCACATGTTTCAGCCCATCCTGTGTCTCCCTGCTGCG
CTGCACCGGCTGCTGCGGCGATGAGAATCTGCACTGTGTGCCGGTGGAGACGGCCAATGTCACCATGCAGCTCCT
AAAGATCCGTTCTGGGGACCGGCCCTCCTACGTGGAGCTGACGTTCTCTCAGCACGTTTCGCTGCGAATGCCGGCC
TCTGCGGGAGAAGATGAAGCCGGAAAGGAGGAGACCAAGGGCAGGGGGAAGAGGAGGAGAGAGAAGCAGAGACC
CACAGACTGCCACCTGTGCGGCGATGCTGTTCCCCGGAGGTAAACCCACCCCTTGGAGGAGAGAGACCCCGCACCC
GGCTCGTGTATTTATTACCGTCACACTCTTCAGTACTCCTGCTGGTACCTGCCCTCTATTTATTAGCCAACTGT
TTCCCTGCTGAATGCCTCGCTCCCTTCAAGACGAGGGGCAGGGAAGGACAGGACCCCTCAGGAATTCAGTGCCTTC
AACAACGTGAGAGAAAGAGAGAAGCCAGCCACAGACCCCTGGGAGCTTCCGCTTTGAAAGAAGCAAGACACGTGG
CCTCGTGAGGGGCAAGCTAGGCCCCAGAGGCCCTGGAGGTCTCCAGGGGCTGCAGAAGGAAAGAAGGGGGCCCT
GCTACCTGTTCTTGGGCCCTCAGGCTCTGCACAGTCAAGCAGCCCTTGCTTTCGGAGCTCCTGTCCAAAAGTAGGG
ATGCGGATCCTGCTGGGGCCGCCACGGCTGGCTGGTGGGAAGGCCGGCAGCGGGCGGAGGGGATCCAGCCACTT
CCCCCTCTTCTTCTGAAGATCAGAACATTTCAGCTCTGGAGAACAGTGGTTGCCTGGGGGCTTTTGCCACTCCTTG
TCCCCGTGATCTCCCCTCACACTTTGCCATTTGCTTGTACTGGGACATTGTTCTTTCCGGCCAAAGGTGCCACCA
CCCTGCCCCCCTAAGAGACACATACAGAGTGGGCCCCGGGCTGGAGAAAGAGCTGCCTGGATGAGAAACAGCTC
AGCCAGTGGGGATGAGGTACCCAGGGGAGGAGCCTGTGCGTCCCAGCTGAAGGCAGTGGCAGGGGAGCAGGTTCC
CCAAGGGCCCTGGCACCCCCACAAGCTGTCCCTGCAGGGCCATCTGACTGCCAAGCCAGATTCTCTTGAATAAAG
TATTCTAGTGTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4053

MPVMRLFPCFLQLLAGLALPAVPPQQWALSAGNGSSEVEVVPFQEVWGRSYCRALERLVDVVSEYPSEVEHMFSP
SCVSLLRCTGCCGDENLHCVPVETANVTMQLLKIRSGDRPSYVELTFSQHVRCECRPLREKMKPERRRPKGRGKR
RREKQRPTDCHLCGDAVPRR

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FIGURE 4054

GATAGACCACCATCATGAACGACACAGTAACTATCCACACTAGAAAGTTCATGATCAACCGACGACTTCAGAGGA
AACAAACAGTCATTGATATCCTTCACCCTGGGAAGGCAACAGTGCCTAAGACAGAAATTTGGGAAAACTAGCCA
AAATGTACAAGACCACACTGGATGTCATCTTTGTATTTGCATTCAAACTCATTTTGGTGGTGGCAAGACAACCG
GCTTTGGCATGATTTATGATCCCCTGGATTATGCAAAGAAAAATGAACCCAAACATAGACTTGCAAGACATGGCC
TGTATGAGAAGAAAAAGACCTCAAGAAAGCAATGAGAGGAACGCAAGAACAGAATGAGGAAAGTCAGGGGGACTG
CAAAGGCCAATGTTGGTGCTGGCAAAAAGCTGAAGGAGTAAAGGTGCTGCAATGGTGTAACTCTGTGGCCATTGTG
GATTTTTTACAAGAATATTAATAAACTAAACACTTCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4055

AAAAGCAAGCCAGGAGGTGCTTGCGGCCGCTTCTAGTAGTTTCCAGGCGCTGCCGGGCGGCTGGCACTAAGCGGT
CCTGAGGCTGTGGCTACGGCTGCTCCGGAGCTGGTGGCGCCGCGATAGGAGAGCCGATGCCCAAGTGGGGTGAGG
GAGACCCACGCTGGATCGTGGAGGAGCGGGCGGACGCCACCAACGTCAACAACCTGGCACTGGACGGAGAGAGATG
CTTCAAATTGGTCCACGGATAAGCTGAAAACACTGTTCTTGGCAGTGCAGGTTCAAAATGAAGAAGGCAAGTGTG
AGGTGACGGAAGTGAGTAAGCTTGATGGAGAGGCATCCATTAACAATCGCAAAGGGAACTTATCTTCTTTTATG
AATGGAGCGTCAAACATAACTGGACAGGTACTTCTAAGTCAGGAGTACAGTACAAAGGACATGTGGAGATCCCCA
ATTTGTCTGATGAAAACAGCGTGGATGAAGTGGAGATTAGTGTGAGCCTTGCCAAAGATGAGCCTGACACAAATC
TCGTGGCCTTAATGAAGGAAGAAGGGGTGAACTTCTAAGAGAAGCAATGGGAATTTACATCAGCACCCCTCAAAA
CAGAGTTCACCCAGGGCATGATCTTACCTACAATGAATGGAGAGTCAGTAGACCCAGTGGGGCAGCCAGCACTGA
AACTGAGGAGCGCAAGGCTAAGCCTGCTCCTTCAAAAACCCAGGCCAGACCTGTTGGAGTCAAAAATCCCCACTT
GTAAGATCACTCTTAAGGAAACCTTCCTGACGTCACCAGAGGAGCTCTATAGAGTGTTTACCACCCAAGAGCTGG
TGCAGGCCTTTACCCATGCTCCTGCAACATTAGAAGCAGACAGAGGTGGAAAGTCCACATGGTAGATGGCAACG
TCTCTGGGGAATTTACTGATCTGGTCCCTGAGAAACATATTGTGATGAAGTGGAGGTTTAAATCTTGGCCAGAGG
GACACTTTGCCACCATCACCTTGACCTTCATCGACAAGAACGGAGAGACTGAGCTGTGCATGGAAGGTGAGGGCA
TCCCTGCTCCTGAGGAAGAGCGGACACGACAGGGCTGGCAGCGGTACTACTTTGAGGGCATTAAACAGACCTTTG
GCTATGGCGCACGCTTATTTTAGGGCCAGCGGCAGGGGACTCCAGCCTGCTGGACACTTCAGTCCAGCTCTCTCC
TGAATGGGGCTTGCGACTCACAGGATTGCATCGTCCAGCTGCTAACTTGGGGCCGGGGCCCCCTCCCTTCCACAT
ATACCTTGGGTTTGTGATGTTTTCTGCTGGGTGGGTTGAGAGGGCAATTTCTCTTTTATGTGTACATATGCTAA
ATAAACATAATTTAAAAAACAAAAA

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FIGURE 4056

MAKWGEGDPRWIVEERADATNVNNWHWTERDASNWSTDKLKTLFLAVQVQNEEGKCEVTEVSKLDGEASINNRKG
KLIFFYEWSVKLNWTGTSKSGVQYKGHVEIPNLSSENSVDEVEISVSLAKDEPDNLVALMKEEGVKLLREAMGI
YISTLKTEFTQGMILPTMNGESVDPVGQPALKTEERKAKPAPSKTQARPVGVKIPTCKITLKETFLTSPEELYRV
FTTQELVQAFTHAPATLEADRGGKFHMVDGNVSGEFTDLVPEKHIVMKWRFKSWPEGHFATITLTFIDKNGETEL
CMEGRGIPAPEEERTRQGWRYYFEGIKQTFGYGARLF

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FIGURE 4057

GTAGGAGTCCGCGGCAGCCTCCGGGTAAGCCAAGCGCCGCGCAGTGCTGAGTTCCCGCACGCCGCGAGAGCCATGG
AGATCGGCACCGAGATCAGCCGCAAGATCCGGAGTGCCATTAAGGGGAAATTACAAGAATTAGGAGCTTATGTTG
ATGAAGAACTTCCTGATTACATTATGGTGATGGTGGCCAACAAGAAAAGTCAGGACCAAATGACAGAGGATCTGT
CCCTGTTTCTAGGGAACAACACAATTCGATTACCCGTATGGCTTCATGGTGTATTAGATAAACTTCGCTCTGTTA
CAACTGAACCCCTCTAGTCTGAAGTCTTCTGATACCAACATCTTTGATAGTAACGTGCCTTCAAACAAGAGCAATT
TCAGTCGGGGAGATGAGAGGAGGCATGAAGCTGCAGTGCCACCCTTGCCATTCCCTAGCGCGAGACCTGAAAAAA
GAGATTCCAGAGTTTCTACAAGTTCGCAGGAGTCAAAAACCACAAATGTCAGACAGACTTACGATGATGGAGCTG
CAACCCGACTAATGTCAACAGTGAAACCTTTGAGGGAGCCAGCACCTCTGAAGATGTGATTGATATTAAGCCAG
AACCAGATGATCTCATTGACGAAGACCTCAACTTTGTGCAGGAGAATCCCTTATCTCAGAAAAAACCTACAGTG
ACACTTACATATGGTTCCTTCTCGCCCTTCTATTGAAATTTATCGACCACCTGCAAGTAGAAATGCAGATAGTGGT
GTTCAATTTAAACAGGTTGCAATTTCAACAGCAGCAGAATAGTATTATGCTGCCAAGCAGCTTGATATGCAGAGT
AGTTGGGTATATGAAACAGGACGTTTGTGTGAACCAGAGGTGCTTAACAGCTTAGAAGAAACGTATAGTCCGTTT
TTTAGAAACAACCTCGGAGAAAATGAGTATGGAGGATGAAAACCTTCGGAAGAGAAAGTTGCCTGTGGTAAGTTCA
GTTGTTAAAGTAAAAAAATTCAATCATGATGGAGAAGAGGAGGAAGAAGATGATGATTACGGGTCTCGAACAGGA
AGCATCTCCAGCAGTGTGTCTGTGCCTGCAAAGCCTGAAAGGAGACCTTCTCTCCACCTTCTAAACAAGCTAAC
AAGAATCTGATTTTGAAGGCTATATCTGAAGCTCAAGAATCCGTAACAAAAACAATACTACTCTACAGTTCCA
CAGAAACAGACACTTCCAGTTGCTCCAGAACTCGAACTTCTCAAGAAGAATTGCTAGCAGAAGTGGTCCAGGGA
CAAAGTAGGACCCCCAGAATAAGTCCCCCATTAAAGAAGAGGAAACAAAAGGAGATTCTGTAGAAAAAAATCAA
GCTGAGATGAGTGAAGTGTGCTGACAGAAACCAGAAAACTTTTGGAGCGCTGCAAGTACTGGCCTGCTTGT
AAAAATGGGGATGAGTGTGCCTACCATCACCCATCTCACCTGCAAAGCCTTCCCCAATTGTAAATTTGCTGAA
AAATGTTTGTGTTTACCCAAATTGTAAATATGATGCAAAGTGACTAAACCAGATTGTCCCTTCACTCATGTG
AGTAGAAGAATTCAGTACTGTCTCCAAAACAGTTGCACCACCAGCACCTTCCAGTAGTCAGCTCTGCCGT
TACTTCCCTGCTTGTAAGAAGATGGAATGTCCCTTCTATCATCCAAAACATTGTAGGTTTAACACTCAATGTACA
AGACCGGACTGCACATTCTACCATCCCACCATTAAATGTCCCACCACGACATGCCTTGAAATGGATTTCGACCTCAA
ACCAGCGAATAGCACCCAGTCCTGCCTGGCAGAAGATCATGCAGTTTGGAAGTTTTTCATGTACTGATGAAAGATA
CTCTACAGAAGTTGTCAAATCTTTGAACTTGAATATATTGCTTTCATAATATGAAGTTTTATTGCCTATCT

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FIGURE 4058

MISLTKTSTLCRRIPYLRKKPTVTLTYGSSRPSIEIYRPPASRNADSGVHLNRLQFQQQNSIHAAKQLDMQSSW
VYETGRLCEPEVLNSLEETYSPPFRNNSEKMSMEDENFRKRKLFPVSSVVKVKKFNHDGEEEEEDDDYGSRTGSI
SSSVSVPAPKERRPSLPPSKQANKNLILKAISEAQESVTKTTNYSTVPQKQTLFPVAPRTRTSQEELLAEVVQQQS
RTPRISPPIKEEETKGDSVEKNQAEMSELSVAQKPEKLLERCKYWPCKNGDECAYHHPISPCKAFPNCCKFAEKC
LFVHPNCKYDAKCTKPDPCPFTHVSRRIPLVLSPKPVAPPAPPSSSQLCRYFPACKKMECPFYHPKHCRFNTQCTRP
DCTFYHPTINVPPRHALKWIRPQTSE

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FIGURE 4059

AATTCCGGCGGAAGTGGTGGAGGAACTTCCGGCAGCGGCAGCTCAAGTGGCCAAGGCAAGATGGGTCAAAGTCAG
AGTGGTGGTTCATGGTCCTGGAGGTGGCAAGAAGGATGACGAGGACAAGAAAAAGAAATATGAACCTCCTGTACCA
ACTAGAGTGGGGAAAAAGAAGAAGAAAACAAAGGGACCAGATGCTGCCAGCAAACCTGCCACTGGTGACACCTCAC
ACTCAGTGCCGGTTAAAAATTACTGAAGTTAGAGAGAATTAAAGACTATCTTCTCATGGAGGAAGAATTCATTAGA
AATCAGGAACAAATGAAACCATTAGAAGAAAAGCAAGAGGAGGAAAGATCAAAAGTGGATGATCTGAGGGGGACC
CCGATGTCAGTAGGAACCTTGGAAAGAGATTATTGATGACAATCATGCCATCGTGTCTACATCTGTGGGCTCAGAA
CACTACGTCAGCATTCTTTTCAATTTGTAGACAAGGATCTGCTGGAACCTGGCTGCTCGGTCCTGCTCAACCACAAG
GTGCATGCCGTGATAGGGGTGCTGATGGATGACACGGATCCCCCTGGTCACAGTGATGAAGGTAGAAAAGGCCCCC
CAGGAGACCTATGCAGATATTGGGGGGTTGGACAACCAATTCAAGGAAATTAAGGAATCTGTGGAGCTTCCTCTC
ACCCATCCTGAATATTATGAAGAGATGGGTATAAAGCCTCCTAAGGGGGTCATTCTCTATGGTCCACCTGGCACA
GGTAAAACCTTGTTAGCCAAAGCAGTAGCAAACCAACCTCAGCCACTTTCTTGAGAGTGGTTGGCTCTGAACTT
ATTCAGAAGTACCTAGGTGATGGGCCCAAACCTCGTACGGGAATTGTTCCGAGTTGCTGAAGAACATGCACCGTCC
ATCGTGTTTATTGATGAAATTGACGCCATTGGGACAAAAAGATATGACTCCAATTCTGGTGGTGAGAGAGAAATT
CAGCGAACAATGTTGGAACCTGCTGAACCAGTTGGATGGATTTGATTCTAGGGGAGATGTGAAAGTTATCATGGCC
ACAAACCGAATAGAACTTTGGATCCAGCACTTATCAGACCAGGCCGCATTGACAGGAAGATTGAGTCCCCCTG
CCTGATGAAAAGACGAAGAAGCGCATCTTTCAGATTCACACAAGCAGGATGACGCTGGCTGATGATGTAACCCTG
GACGACCTGATCATGGCTAAAGATGACCTCTCTGGTGTGACATCAAGGCAATCTGTACAGAAGCTGGTCTGATG
GCCTTAAGAGAACGTAGAATGAAAGTAACAAATGAAGACTTCAAAAAATCTAAAGAAAATGTTCTTTATAAGAAA
CAGGAAGGCACCCCTGAGGGGCTGTATCTCTAATGAACCATGGCTGTCATCAGGAAAATGGTTGGGAGATTCTC
AATCCCTGAAAGGGATGAGGTGGGGGAGTTGCCAGAGGAATCCCTGTTCCCACTGATTTTATTAGCAAAACA
TCCTGTGTCTTTTGGAGTACGATGTGTAAGTGCCCATGGGTGGCCTGTGGTCACTGTGCAGCAGTCTGCTTCC
CAATAAAGCGTGCTCTTTCACAAG

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FIGURE 4060

MGQSQSGGHGPGGGKKDDEDKKKKYEPPVPTRVGKKKKKTKGPDAAASKLPLVTPHTQCRLKLLKLERIKDYLLME
EEFIRNQEOMKPLEEKQEEERSKVDDL RGT PMSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVDKDLLEPGCSV
LLNHKVVHAVIGVLMDDTDPLVTVMKVEKAPQETYADIGGLDNQIQEIKESVELPLTHPEYYEEMGIKPPKGVILY
GPPGTGKTLLAKAVANQTSATFLRVVGSELIQKYLGDGPKLVRELFVAAEEHAPSIVFIDEIDAIGTKRYDSNSG
GEREIQRMTLELLNQLDGFSRGDVKVMATNRIETLDPALIREGRIDRKIEFPLPDEKTKKRIFQIHTSRMTLA
DDVTLDLIMAKDDL SGADIKAICTEAGLMALRERRMKVTNEDFKKSKENVLYKKQEGTPEGLYL

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FIGURE 4061

CCTTTTCGGCCCGGAACCGCCATGTTCCAGTAATTGCGCCAAATGACGAACACAAAGGGAAAAGAGGAGAGGCACCCG
ATATAIGTTTCTCTAGGCCTTTTAGAAAACATGGAGTTGTTCCCTTTGGCCACATATATGCGAATCTATAAGAAAAGT
TGATATTGTAGACGTCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAAACTGG
AAGAGTCTACAGTGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAA
GAGAATTAATGTGCGTATTAAGCACATTAAGCACTCTAAGAGCCAAGATAGCTTCCTGAAACGCGTGAAGGAAAA
TGATCCTCCACCCAGAGAAGCACACTTTGTGAGAACCAGTGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTG
TGAATTCATGGCATAAATAGGTGTT

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FIGURE 4062

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKVDIVDVKGMGTVQKGMPHKCYHGKTGRVYSVTQHAVGIV
VNKQVKGKILAKRINVRIKHIKHSKSQDSFLKRVKENDPPPREAHFVRTSGKEPELLEP IPCEFMA

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FIGURE 4063

AGTGGTGCTGGGAGTGTCGTGGACGCCGTGCCGTTACTCGTAGTCAGGCGGCGGCGCAGGCGGCGGCGGCGGCAT
AGCGCACAGCGCGCCTTAGCAGCAGCAGCAGCAGCAGCAGCATCGGAGGTACCCCCGCCGTGCGAGCCCCCGCGC
TGGTGACGCCACCCTCGCTCCCTCTGCTCTTCCCTCCCTTCGCTCGCACCATGGCTGATCAGCTGACCGAAGAACA
GATTGCTGAATTCAAGGAAGCCTTCTCCCTATTTGATAAAGATGGCGATGGCACCATCACAAACAAAGGAACCTGG
AACTGTCATGAGGTCACCTGGGTGAGAACCCAAACAGAAGCTGAATTGCAGGATATGATCAATGAAGTGGATGCTGA
TGGTAATGGCACCATTGACTTCCCCGAATTTTTGACTATGATGGCTAGAAAAATGAAAGATACAGATAGTGAAGA
AGAAATCCGTGAGGCATTCCGAGTCTTTGACAAGGATGGCAATGGTTATATCAGTGCAGCAGAACTACGTCACGT
CATGACAAACTTAGGAGAAAACTAACAGATGAAGAAGTAGATGAAATGATCAGAGAAGCAGATATTGATGGAGA
CGGACAAGTCAACTATGAAGAATTCGTACAGATGATGACTGCAAAATTGAAGACCTACTTTCAACTCCTTTTTCCC
CCCTCTAGAAGAATCAAATTGAATCTTTTACTTACCTCTTGCAAAAAAAGAAAAAGAAAAAGTTCAATTTATT
CATTCTGTTTCTATATAGCAAACTGAATGTCAAAAGTACCTTCTGTCCACACACACAAATCTGCATGTATTGG
TTGGTGGTCCGTGTCCTTAAAGATCAAGCTACACATCAGTTTTACAATATAAATACTTGTACTACCTTAATGATA
AGGACTCCTTAAAGTTCCATTTGCTAATGATTAATACACTGTTTGGGCTGGCCAGTTTTTCATGCATGCAGCTTG
ACGATTGAGCACAGTCAGGCCTTTGTATTAAAAATGAAAAATGAAAAACAAATTCAAAACCTATTCAAATGGGT
TCTAGTTCAATTTGTTTAGTATAAATTGTCATAGCTGGTTTACTGAAAACAAACACATTTAAAATTTGGTTTACCT
CAGGATGACGTGCAGAAAAATGGGTGAAGGATAAACCGTTGAGACGTGGCCCCACTGGTAGGATGGTCCTCTTGT
ACTTCGTGTGCTCCGACCCATGGTGACGATGACACACCCTGGTGGCATGCCCCGTGTATGTTGGTTTAGCGTTGTC
TGCATTGTTCTAGAGTGAAACAGGTGTCAGGCTGTCAGTGTTCACACAAATTTTAATAAGAAACATTTACCAAG
GGAGCATCTTTGGACTCTCTGTTTTTAAACCTTCTGAACCATGACTTGGAGCCGGCAGAGTAGGCTGTGGCTGT
GGACTTCAGCACAAACCATCAACATTGCTGTTCAAAGAAATTACAGTTTACGTCCATTCCAAGTTGTAAATGCTAG
TCTTTTTTTTTTTTTTTTCCAATAAA

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FIGURE 4064

MADQLTEEQIAEFKEAFSLFDKDGDTITTKELGTVMRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLTMMAR
KMKD TDSEEEIREAFRVFDKDGNGYISAAELRHVMTNLGEKLTDEEVDEMIREADIDGDGQVNYEEFVQMMTAK

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FIGURE 4065

GCTGCCACCGCTCCTGCCACTGCAGTGCTCGAGCCCCGTGCAGGGGAGCTTGCGGGAGGATCGACCGACAGACGG
ACGCACGCCGAGGCACTGCGCCCCAGCCCCGCGCCGGTGCCACCGCAGCCCCGACCCCGGCCGAGTCCAGCCG
CCCCTCGCCCGGTGCTTAGGTGCCCGGCCACACCGCCAGCTGCTCGGCGCCCGGGTCCGCCATCGCTCCGCC
GCTGTCTTGGCTCTTCTGCTCTGCGCCGGGCAAGTCACTGCGCTCCCTGTGAACAGCCCTATGAATAAAGGGGAT
ACCGAGGTGATGAAATGCATCGTTGAGGTCACTCTCCGACACACTTTCCAAGCCCAGCCCCATGCCTGTGAGCCAG
GAATGTTTTGAGACACTCCGAGGAGATGAACGGATCCTTTCCATTCTGAGACATCAGAATTTACTGAAGGAGCTC
CAAGACCTCGCTCTCCAAGGCGCCAAGGAGAGGGGCACATCAGCAGAAGAAACACAGCGGTTTTGAAGATGAACTC
TCAGAGGTTCTTGAGAACCAGAGCAGCCAGGCGGAGCTGAAAGAGGCGGTGGAAGAGCCATCATCCAAGGATGTT
ATGGAGAAAAGAGAGGATTCCAAGGAGGCAGAGAAAAGTGGTGAAGCCACAGACGGAGCCAGGCCCCAGGCCCTC
CCGGAGCCCATGCAGGAGTCCAAGGCTGAGGGGAACAATCAGGCCCTGGGGAGGAAGAGGAGGAGGAGGAGGAG
GCCACCAACACCCACCTCCAGCCAGCCTCCCCAGCCAGAAATACCCAGGCCACAGGCCGAGGGGGACAGTGAG
GGCCTCTCTCAGGCTCTGGTGGACAGAGAGAAGGGCTGAGTGAGAGCCAGGGTGGCAGGCAAAGAGAGAAGAG
GAGGAGGAGGAGGAGGAGGAGGCTGAGGCTGGAGAGGAGGCTGTCCCCGAGGAAGAAGGCCCCACTGTAGTGCTG
AACCCCAACCCGAGCCTTGGCTACAAGGAGATCCGGAAGGCGAGAGTCCGTCGGAGGCTCTGGCTGTGGATGGA
GCTGGGAAGCCTGGGGCTGAGGAGGCTCAGGACCCGAAGGGAAGGGAGAACAGGAGCACTCCAGCAGAAAGAG
GAGGAGGAGGAGATGGCAGTGGTCCCGCAAGGCCTCTTCCGGGGTGGGAAGAGCGGAGAGCTGGAGCAGGAGGAG
GAGCGGCTCTCCAAGGAGTGGGAGGACTCCAAACGCTGGAGCAAGATGGACCAGCTGGCCAAGGAGCTGACGGCT
GAGAAGCGGCTGGAGGGGCAGGAGGAGGAGGACAACCGGGACAGTTCCATGAAGCTCTCCTTCCGGGCCCGG
GCCTACGGCTTCAGGGGCCCTGGGCCGAGCTGCGACGAGGCTGGAGGCCATCCTCCCGGGAGGACAGCCTTGAG
GCGGGCCTGCCCCCTCAGGTCCGAGGCTACCCCGAGGAGAAGAAAGAGGAGGAGGGCAGCGCAAACCGCAGACCA
GAGGACCAGGAGCTGGAGAGCCTGTGCGCCATTGAAGCAGAGCTGGAGAAAGTGGCCACCACTGTCAGGCACTA
CGCGGGGCTGAGACACCGGCTGGCAGGGCTGGCCCCAGGGCACCTGTGGCCCTGGCTCTGCTGTCCCCTTGGC
AGGTCTTGCCAGATGGCCCGGACGCTGCTTCCGGTAGGGAGGCAGCCTCCAGCCTGCCAAGCCAGGCCACCC
TATCGCCCCCTACGCGCCTTGTCTCTACTCCTGACTCCTACCTGCCCTGGAACATCCTTTGAGGGCAGCCCCA
CAACTTTAAACATTGACGATTCTTCTCTGAACACAGGCAGCTTTCTAGAAGTTTCCCTTCCCTCCATCCTATCCA
CTGGGCACAACCTGCAATAACTTCTGACCTTTTGGTGAAAGCTGAGAAGCTCCTGACTGTAACATATTCTGTATGAA
CTTTATCTAAAGAAAAATAAATCTGTTCTGGGCTCTTTCCCTCTG

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FIGURE 4066

MRSAAVLALLLCAGQVTALPVNSPMNKGDTVMKCIVEVISDTLSKPSMPVVSQECFETLRGDERILSILRHQNL
LKEQLDLALQGAKERAHQKKHSGFEDELSEVLENQSSQAEELKEAVEEPSSKDVMEKREDSKEAEKSGEATDGAR
PQALPEPMQESKAEGNNQAPGEEEEEEATNTHPPASLP SQKYPGPQAEGDSEGLSQGLVDREKGLSAEPGWQA
KREEEEEEEAEAGEEAVPEEEGPTVVLNPHPSLGYKEIRKGESRSEALAVDGAGKPGAEEAQDPEGKGEQHS
QQKEEEEMAVVPQGLFRGGKSGELEQEEERLSKEWEDSKRWSKMDQLAKELTAEKRLLEGQEEEDNRDSSMKLS
FRARAYGFRGPGPQLRRGWRPSSREDSLEAGLP LQVRGYPEEKKEEEGSANRRPEDQELESLSAIEAELEKVAHQ
LQALRRG

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FIGURE 4067

GACTGCGCGCCCCAGCTCCGATCCCCGTTCCGCGTCCCCGCCGCCGGGAGGAGGTGCCCACTCGCTCGCGGCGCG
CGCCGGCCGCCAGACTCGGCCTGTGGGCGATTTCTCCGGACCCAGGCTCCCCGCCCGAGGAGGAAGATGCAGAC
CTTTCTGAAAGGGAAGAGAGTTGGCTACTGGCTGAGCGAGAAGAAAATCAAGAAGCTGAATTTCCAGGCCTTCG
CGAGCTGTGCAGGAAGCGAGGGATGGAGGTTGTGCAGCTGAACCTTAGCCGGCCGATCGAGGAGCAGGGCCCCCT
GGACGTCATCATCCACAAGCTGACTGACGTCATCCTTGAAGCCGACCAGAATGATAGCCAGTCCCTGGAGCTGGT
GCACAGGTTCCAGGAGTACATCGATGCCCACCCTGAGACCATCGTCTGGACCCGCTCCCTGCCATCAGAACCCT
GCTTGACCGCTCCAAGTCCTATGAGCTCATCCGGAAGATTGAGGCCTACATGGAAGACGACAGGATCTGCTCGCC
ACCCTTCATGGAGCTCACGAGCCTGTGCGGGGATGACACCATGCGGCTGCTGGAGAAGAACGGCTTGACTTTCCC
ATTCAATTTGAAAACAGAGTGGCTCATGGCACCACCTCTCACGAGATGGCTATCGTGTTCAACCAGGAGGGCCT
GAACGCCATCCAGCCACCCTGCGTGGTCCAGAAATTCATCAACCACAACGCCGTCTGTACAAGGTGTTCTGTGGT
TGGCGAGTCTACACCGTGGTCCAGAGGCCCTCACTCAAGAACTTCTCCGCAGGCACATCAGACCGTGAGTCCAT
CTTCTTCAACAGCCACAACGTGTCAAAGCCGGAGTCGTATCGGTCTGACGGAGCTGGACAAGATCGAGGGCGT
GTTTCGAGCGGCCGAGCGACGAGGTCATCCGGGAGCTCTCCGGGCCCTGCGGCAGGCACTGGGCGTGTACTCTT
CGGCATCGACATCATCAACAACCAGACAGGGCAGCACGCCGTCATTGACATCAATGCCTTCCCAGGCTACGA
GGGCGTGAGCGAGTTCTTACAGACCTCCTGAACCACATCGCCACTGTCTGCAGGGCCAGAGCACAGCCATGGC
AGCCACAGGGGACGTGGCCCTGCTGAGGCACAGCAAGCTTCTGGCCGAGCCGGCGGGCGGCCTGGTGGGCGAGCG
GACATGCAGCGCCAGCCCCGGCTGCTGCGGCAGCATGATGGGCCAGGACGCGCCCTGGAAGGCTGAGGCCGACGC
GGGCGGCACCGCCAAGCTGCCGCACCAGAGACTCGGCTGCAACGCCGGCGTGTGCCCCAGCTTCCAGCAGCATTG
TGTGGCCTCCCTGGCCACCAAGGCCTCCTCCAGTAGCCACGGAGCCGGGACCCAGAGGGGCAGCGCAGGGCGCA
GAGCACACCCGCTGGGCCAGCAGCTCCCAACGGCGATGCTACTACTAAGAATCCCCAGTGATCTGATTCTTCTGT
TTTTTAATTTTAACTGATTCTCTGATGTCATGATCTAAATGAGGGGTAGTGGGGGATGGAAGAGAGTACCAGG
TGGTCCACCGTTGGGGAGTGGGGCCGTCCGCCTGCTCTACTGTGCAGACCTCCTAACTGAGTTTACACACGCT
TGTGTTTGAACACTAGGTCTGGATGGGAGGTGAGGGGTGTGCGTATGGCTGCCATGCCAGTGTCTGTGCATC
CCTGTCTGTTGGTCTCCATGGCCACTGTGGACCGGACCCCTTGGGGGAAGCCTGCCATGTGCGGCTGTGGGAGG
CTGATCGGTGCATGTGAGAGTGGCTTCCCTTCTGCCTGACTCCCCACTCCCTGACCTGCCCCCTTCTTGTTTTTT
CTCCTACTGGTCTCCACCAAGGCTTTGTTAGCCCCCACCCTGCCTGGTGTGCAGCTAACCCTCCCTCCCCACAG
CCAGAGGAGGCCACAGACCCCTCAGGGGAGTTCGCGCTGGGGTCTGGGCTGTGCTCCCTCACTAAAGGGAAGGA
AAGGAAGCTGGGCGTCTCTGGGCCCCCAACACACGTCCCATTTAGCCCTGCACAGCGGTCTCCTTCCCCTAAG
CCAGCACTGCTGCTCCCTGGAGCCCGGAAGGAGGCTGCCTGGCTGGAGGCCCGAGCCGATGGCGCCTGTGCTGA
GGATTTGTGCTGTGATTGGGCAAATCATTCCAGGTCTTTGGGCTCCACCCCTTGTCTCTAGTGGACATTTGA
GATCAGAGAGCACCACAGGGCTGGCTTTGTGCCCTAACCCCTGGGATGCAGCCTGCCTTTCCATAAAGTACCTA
GGTGAGGATAGGCGCGGGAGCCTCGGCATGACACCATGGAGATCGGGGCCCTCTTCCAGTGGGTTCACTCCTTT
TCACACCTGCTGGGTCCCTCCTCACCCAGCAGGCCTGGTCCACCTCTCATTGCAAGCCCCAAGCACTGAGCCAGC
AGGTGCCAGGGAGCCACCCGCCCCCATCGCTTCTGCACACCTCAGACTCACCCCATCACCTTGGCAGCAAAGCA
CTGGCTCTGCCGTCTGACCCCTGATCCAGGCAGCCCCCTCTGCAGAGAAAAGGGTTGGGGAGAAGCCTCTGCAGT
CCTGGAAGATGTGGGGTGTGGGTGAGAGGCATCAGCCCCACAAGTATGTTTTTGTGTCTTAAGATAGCAGTTT
ACTTTGAAAAAGTAAAAAGGCTTCCGGGCTGTCTCTGCCAGTGAGATGGAGGACGCTAGAGAAAGTGCTGAG
TGTCCCGAGAGAGGCCCGCCGAGCCAGTGCATGGAGGTCTTCGGCCTGGCTCAGCTGGGCTGCAGGATGCCCACT
TTGAGGAGGGAGGCACAGGGCTTGGGCGAGGGGCAGAGGCCATCAGAAGTCCCGGCTTTTTTGGAACTGAGGA
CCCAACAATAACCACGTTTACACGACTTGAGTTTTGAACCCCGATTAATGTCTGTACGTCACCTTTCCTAGTTC
TGACCCTGAGCCCTGGGGAACAGGAAAGCGTGGCTGGCCTCTTGCACTGCTTTGTCTCCAAATAAATACTACTGAA
ATCAAACCGCA

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FIGURE 4068A

GTATTCTCCGCCGCCCCACGCCCTCGAGGTCCCCGCCACCGAACCAGCGGCGGAGCCCCGCCCGCCTCCCGCG
GCATTCCCGCACCGGATCGCTCCTCGCTGGGGCGGGACCTGGCCTGGCGGCTCTGGTCACTATGAGTGAAACATC
TTTCAACCTAATATCAGAAAAATGTGACATTCTATCCATTCTTCGGGACCATCCTGAAAACAGGATTTACCGGAG
GAAAATCGAGGAACCTCAGCAAAAGGTTACCGCCATCCGCAAGACCAAAGGGGATGGGAACCTGCTTCTACAGGGC
CTTGGGCTATTCTTACCTGGAGTCCCTGCTGGGGAAGAGCAGGGAGATCTTCAAGTTCAAAGAACGCGTACTGCA
GACCCCAAATGACCTTCTGGCTGCTGGCTTTGAGGAGCACAAGTTCAGAACTTCTTCAATGCTTTTTACAGTGT
GGTGGAACTGGTAGAGAAGGATGGCTCAGTGTCCAGCCTGCTGAAGGTGTTCAACGACCAGAGTGCCTCGGACCA
CATCGTGCAGTTCCTGCGCCTGCTCACGTGCGCCTTCATCAGGAACCGAGCAGACTTCTTCCGGCACTTCATTGA
TGAGGAGATGGACATCAAAGACTTCTGCACTCACGAAGTAGAGCCCATGGCCACGGAGTGTGACCACATCCAGAT
CACGGCGTTGTGCGCAGGCCCTGAGCATTGCCCTGCAAGTGGAGTACGTGGACGAGATGGATAACCGCCCTGAACCA
CCACGTGTTCCCTGAGGCCGCCACCCCTTCCGTTTACCTGCTCTATAAAACATCCCACTACAACATCCTTTATGC
AGCCGATAAACATTGATTAATTTTAGGCCATGCAGTGGAACTGTACCTAATGGGACTGCATTCTGAATGGAAC
ATTCCGGCTCTTCAATTTTTTAAGCAATTTAGACTGTAGCAAGAAAAATGTGCAGCCTTTTGGGCAAAGCCCCCTGG
GAACGAGGCCTATCCACTATGGACTATGGTAACTTGGTAGGATTTTATGATTTATTTTAAATGGAGGGACAAATG
CTTCTAACTGGGCCCCGACTCCGCACCCCACTTCGCAGTGAAGGCCCTGGGTGGGTACCTGCCCTCTCTGGAC
TTGTTTCTTCAACTGGAGGAGTCCCTGCCTATGCTGACATTCCATTGTAGAAAAATGGGGCCTCTGGTGTCTCT
TTACCAGGGGAGTGCTCTCTGCGGGGAGGAAAAAGCTCAAGGTAGCTGTCTTAACCCAAGTGACTTACCAGG
CCTACAAAAGAGTCCAGTCCAGTCACTTGTGGACTGGGCTCTGACAGATGGCCTATTGAGGTCAACTTGAATGT
GAGGGCTACGGTGTGGTTTCAAACATTCATGATGGATGTATTTTCTACCCCTAACTTAAGGAGAAAAA
GACTTCTTTTTTTGCCAAAGTCCAGAAAGGGGCCCTTTAGCCTTTAGTAGGAGCTCAAATTTGTTGGGGCCCCCTCT
ACCTCTCTCAGGGCTAGAACTGCCTGACTCTTGGTGGACGAGCCCTTCAGGGTTCTGCTTTACGCCCCACCTGGA
CAGAGGCTTACAAGACTAGGGTCTGGACCAGAATCTGTGTATTTCTGTCTGGGACCAGGAAGCCGCAGCTGTCCC
ATCATCCCCAGCAATCCTAGAAGTGGAGTCTGGATACTTCAAGGATAGAAGTGTGGCAGGCACAGCCATGGAC
CCAGCTGAGCAGAGCAGACGCTTTCAGGGCTGCCCCCTGGCTTCTTCTCCTTTCCCGCTTCTGCTCTCTTTATG
GACTGGTCAGAGGGTAGGTGGGAAAGAACAGACAAGCCATGGGAAGTTGGCAGTGGGGAGATTTCCACTGTGGAA
ACCGCCTGGGAATTCCGGCCAGCAGCTTCTCCTTCAGCCACCTGGCCATACCCCTTAAATAAGCCCCCTCACCTT
GCTGCCTCAGGACCTTCAAGATTCCATCTGTGGGCTGGCCGGCAAGATGGCACCAGTGGGGACCCACACCCTGGC
TGGGCAGAGGTGCTGCTAGCAACCTCTCTTCTCTATAAGAGGAAATGGAAAATGCAGGGTGTGAATTGCCCTT
TGGGGTCCCTTCTTAAATTGAAGGCCACCTTCTCACAGGTTTCATTCTGCAGGGATTTACTGGAATCTATTGGTGC
TGCTGCATGATGCTGCTGACAACCTGACTGCACAAGGACTGGGTAGCAGACTCCTCAGAGTCCCTTGACACAAA
TGTCAGATTTGTGTCACTCTTCTGCCTTCGTGAAAAGCCAAATAGCACTCTCAGATATCAGGGGATTTTAGTTCCA
AGCAGGGACCCCTGGTTTCCATACTGCCCTCAGCTGGAGTTTGGATCCAAAGGCTCTGGCTAAGTCAATATGTCAC
TTTTTTCAGGAATGTAAATTTGACTGTACCTCTGAATTTGTTTCAGTGTCCACCATGGTCTATGAAAGTACA
CTGGAAGCGTGGGGGGAACACATGACATGATTTGTGAATATCATCATCTTTGCCAGACAAGTCTCCAGGGGATCC
CTGTTTCCCAACTGAAAGGTGTGAACGGACACACACACAGCCTGGATGACGCCTTGGCTGTTCTAAGGGGTGTA
AGGTGGGCTCTGGGCCTTCCAGCTAGGCTCTCAAGCACAGCAGAAGCCTCACTGGGCTGCTATGTCTCTGTATTT
GTGGCTTGTGTGGTAGCCTCAGAAGCAGAGCTGTTTGGCAGACTGGCTGGAGAAATTCCTCTAGGAGACTTGCC
TGTGCTGTGCTTCCAGGTCACAGAGCCCCCGGAAACTCACAGGGGCCCTCTTCCAGAAAAGAAATCTATTCTAT
CACTTCAGAATCAGGACACTCAAGCTCTGGCAGAGGAAGGCCAAGTTACTTTCATGGTCTTACCCCTGCTTTTC
CCCTTTTTTGAAAAAACACTGGCCAAATCCGAACATTGCCCCTTGTTCCTCCACGTTCTCTCTCAGATCTTTG
TCTCGAAGGGAAAAACATAGTGATGAAAAGGTGTGGCAGGCTTTGGCACCTTGTTAAATTTCTAGTCATCTGTG
GATGTTACCTTGCTTGTCCACAGCAGCCAGTCAACCCTGGCCAGTCCCCTTCTGGATAATTCTCTACCCCTCACC
CCACAGAGCCATCTCTCTCCAGACCAAAGCTGGAAGGAGAGTTGCTTTGAGAGCTTGTTTTTACAACCTGCATGT
TTATTATGATACTTTCTCTCAAAGGAACTTTTAAATCAATGGGAACAATTAGCAACAGAAAGAGCACAGTCCC
TGCTTTTGACTGGGTTCCTATTTTAAAGCACAATGAGAGCTCTGGAGCCAGAATGCCAGGGTTCTAACTTCAGCA
TTCATTACTAGCTGTATGATCTTGGCCAAGTCACTTCACCTCCCTGAGCCCCAATTCCCAAGTTTGTGAAATGG
CAACAATACCTATGTGTCACTGGATTATTGGTTAAACAGAATGAGATTCCCTTGTGTGAAAATAGCTATTATACC
TGACACACTCATCGTATGGGCTCTGCAAAGGGATATTCCCCAACCTGTCTTCTGACAGGAAGCATAGGGCACT

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FIGURE 4068B

GCAGATGGGGAAGCATGTCACCTTGGCAGTGACTCGGTGGCTTCCCAAGCAGGAGTGTCAGGGGAACCATGAGAG
AGAGTCTAGGAGCAAACACATCACCACCCTGAGCAGATACAGGAGTGGGGAGGGGGCTGTAACCTCAGTGAGTGGC
TTCCAGGGGCCCCAGGCCCTGCTGGATGTGGGCCAAGCCCTACAGCTTCCCTAGGCAGTAAGTAAAAACATTCTC
CTAGCATTAAATGGTTTCCAT

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FIGURE 4069

CCGGAAGTGCAGTTGCTGCTGCAGCTGAGGTACAGCGGCGGTTTCTGAGGTTCTTCACTCGCGACTGACGGAGCT
GCGGTGGCGTCTCCACACGCAACCAATGAAGTTGAAGGACACAAAATCAAGGCCAAAGCAGTCAAGCTGTGGCAAA
TTTCAGACAAAGGGAATCAAAGTTGTGGGAAAATGGAAGGAAGTGAAGATTGACCCAAATATGTTTGAGATGGA
CAGATGGATGACTTGGTGTGCTTTGAGGAATTGACAGATTACCAAGTTGGTCTCCCTGCCAAGAATCCCTCCAGT
CTCTTCTCAAAGGAAGCACCCAAGAGAAAGGCACAAGCTGTTTCAGAAGAAGAGGAGGAGGAGGGGAAAGTCT
AGCTCACCAAAAGAAAAAGATCAAGTTGAAGAAAAGTAAAAATGTAGCAACTGAAGGAACCAAGTACCCAGAAAGAA
TTTGAAGTGAAGATCCTGAGCTGGAGGCCAGGGAGATGACATGGTTTGTGATGATCCGGAGGCTGGGGAGATG
ACATCAGAAAACCTGGTCCAACTGCTCCAAAAAAGAGAAAAATAAAGGGAAAAAGGGTTGGAGCCTTCTCAG
AGCACTGCTGCCAAGGTGCCAAAAAGCGAAGACATGGATTCTGAAGTTGATGATCAGAAAGCAGATGTGTCA
GCTTGGAAAGGACCTGTTTGTTCAGGCCGTTCTCCGAGCACTCAGCTTCTAGGCTTCTCTGCACCCACACCA
ATCCAAGCCCTGACCTTGGCACCTGCCATCCGTGACAACTGGACATCCTTGGGGCTGCTGAGACAGGAAGTGGG
AAAACCTCTTGCCCTTTGCCATCCCAATGATTGATGCGGTGTTGCAGTGGCAGAAGAGGAATGCTGCCCCCTCCTCCA
AGTAACACCGAAGCACCACCTGGAGAGACCAGAAGTGAAGCCGGAGCTGAGACTAGATCACCAGGCAAGGCTGAA
GCTGAGTCTGATGCATTGCCTGACGATACTGTAATTGAGAGTGAAGCACTGCCCAGTGATATTGCAGCCGAGGCC
AGAGCCAAGACTGGAGGCACCTGCTCAGACCAGGCGTTGCTCTTTGGTGACGATGATGCTGGTGAAGGGCCTTCT
TCCCTGATCAGGGAGAAACCTGTTCCCAAACAGAATGAGAATGAGGAGGAAAAATCTTGATAAAGAGCAGACTGGA
AATCTAAAACAGGAGTTGGATGACAAAAGCGCCACCTGTAAGGCATATCCAAAGCGTCTCTGCTTGGACTGGTT
CTGACTCCCACTCGAGAGCTGGCCGTCCAGGTCAAACAGCACATTGATGCTGTGGCCAGGTTTACAGGAATTA
ACTGCTATTTTGGTTGGTGGAAATGTCCACGCAGAAAACAGCAGAGGATGCTGAACCGTCGTCCTGAGATTGTGGT
GCTACTCCAGGCCGGCTGTGGGAATTAATTAAAGAAAAGCATTATCATTTGAGGAACCTTCGGCAGCTCAGGTGC
CTGGTAGTGGATGAGGCTGACCGGATGGTTGAGAAAAGGCCATTTTGTGAGCTCTCACAGCTGCTAGAGATGCTC
AATGACTCCCAATACAAACCAAGAGACAAACGCTTGTTTTTCTGCCACACTCACCTGGTGCATCAGGCTCCT
GCTCGAATCCTTCATAAGAAGCACACCAAGAAAATGGATAAAACAGCCAACTTGACCTCCTTATGCAGAAAATT
GGCATGAGGGGGCAAGCCCAAGGTCATTGACCTCACAAGGAATGAGGCCACGGTGGAGACGCTAACAGAGACCAAG
ATCCATTGTGAGACTGATGAGAAAAGACTTCTACTTGTACTACTTCTGATGCAGTATCCAGGCCGAGCTTAGTG
TTTGCCAACAGTATCTCTGCATCAAACGCTCTCTGGGCTCCTCAAAGTCTTGATATCATGCCCTTGACCTG
CATGCCTGTATGCACCAGAAGCAGAGGCTCAGAAACCTGGAGCAGTTTGCCCGTCTGGAAGACTGTGTTCTCTTG
GCAACAGATGTGGCAGCTCGGGGTCTGGATATTCCTAAAGTCCAGCATGTATCCATTACCAGGTCCCACGTACC
TCGGAGATTTATGTCCACCGAAGTGGTGAAGTCTGAGCTACCAATGAAGGCCTCAGTCTGATGCTCATTGGG
CCTGAGGATGTGATCAACTTTAAGAAGATTTACAAAACGCTCAAGAAAGATGAGGATATCCCACTGTTCCCCGTG
CAGACAAAATACATGGATGTGGTCAAGGAGCGAATCCGTTTAGCTCGACAGATTGAGAAATCTGAGTATCGGAAC
TTCCAGGCTTGCTGCACAACTCTTGATTGAGCAGGCAGCAGCTGCCCTGGAGATTGAGCTGGAAGAAGACATG
TATAAGGGAGGAAAAGCTGACCAGCAAGAAGACGTCGGAGACAAAAGCAGATGAAGGTTCTGAAGAAGGAGCTG
CGCCACCTGCTGTCCAGCCACTGTTTACGGAGAGCCAGAAAACCAAGTATCCCACTCAGTCTGGCAAGCCGCC
CTGCTTGTGTCTGCCCAAGTAAGAGCGAGTCTGCTTTGAGCTGTCTCTCAAGCAGAAGAAGAAGACAAAG
AAGCCGAAGGAGCCACAGCCGGAACAGCCACAGCCAAGTACAAGTGCAAAATTAAGTGGTCAAGTGTGTGAGTAC
TGCACATTGGTTTCTGTTCTCTGGCTATTTGCAAAACCTCTCCACCCCTTGTGTTTCACTCCACCACCAACCCCA
GGTAAAAAAGTCTCCCTCTCTTCCACTCACACCCATAGCGGGAGAGACCTCATGCAGATTTGCATTGTTTGGAG
TAAGAATTCAATGCAGCAGCTTAATTTTTCTGTATTGCAGTGTATATAGGCTTCTTGTGTGTTAACTTGATTTT
ATAAATTAATAACAATGGTCAGAAAAA

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FIGURE 4070

MKLKDTKSRPKQSSCGKFQTKGIKVVGKWKEVKIDPNMFADGQMDDLVCFEELTDYQLVSPAKNPSSSLFSKEAPK
RKAQAVSEEEEEEGKSSSPKKKIKLKKSKNVATEGTSTQKEFEVKDPELEAQGDDMVCDDPEAGEMTSENLVQT
APKKKKKNKGKKGLEPSQSTAACKVPKKAKTWIPEVHDQKADVSAWKDLFVPRPVLRAISFLGFSAPTP IQALT LAP
AIRDKLDILGAAETGSGKTLAFAIPMIHAVLQWQKRNAAPPPSNT EAPPGETRTEAGAETRSPGKAEAESDALPD
DTVIESEALPSDIAAEARAKTGGTVSDQALLFGDDDAGEGPSSLI REKPVPKQNEENEEENLDKEQTGNL KQELDD
KSATCKAYPKRPLLGLVLTPTRELAVQVKQHIDAVARFTGIKTAILVGGMSTQKQQRMLNRRPEIVVATPGRLWE
LIKEKH YHLRNLRQLRCLVVDEADRMVEKGHFAELS QLLEMLNDSQYNPKRQTLVFSATLTLVHQAPARILHKKH
TKKMDKTAKLDLLMQIGMRGPKPKVIDLTRNEATVETLTETKIH CETDEKDFYLYYFLMQYPGRSLVFANSI SCI
KRLSGLLKVLDDIMPLTLHACMHQKQRLRNLEQFARLEDCVLLATDVAARGLDIPKVQHVHYQVPTSEIYVHRS
GRTARATNEGLSLMLIGPEDVINFKKIYKTLKKDEDIPLFPVQTKYMDVVKERIRLARQIEKSEYRNFQACLHNS
WIEQAAAALEIELEEDMYKGGKADQQEERRRQKQMKVLKKELRHLLSQPLFTESQKTKYPTQSGKPPLLVSAPSK
SESALSCLSKQKKKKTKKPKEPQEPQPSTSAN

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FIGURE 4071

GCTGAAGTTGAGGATCTCTTACTCTCTAGGCCACGGAATTAACCCGAGCAGGCATGGAGGCCTCTGCTCTCACCT
CATCAGCAGTGACCAGTGTGGCCAAAGTGGTCAGGGTGGCCTCTGGCTCTGCCGTAGTTTTGCCCTGGCCAGGA
TTGCTACAGTTGTGATTGGAGGAGXXXXXXXXXXXXXXXXXCTGTGCCCATGGTGCTCAGTGCCATGGGCTTCACTG
CGGCGGGAATCGCTCGTCTCCATAGCAGCCAAGATGATGTCCGCGGCGGCCATTGCCAATGGGGGTGGAGTTG
CCTCGGGCAGCCTTGTGGCTACTCTGCAGTCACTGGGAGCAACTGGACTCTCCGGATTGACCAAGTTCACTCTGG
GCTCCATTGGGTCTGCCATTGCGGCTGTGATTGCGAGGTTCTACTAGCTCCCTGCCCCTCGCCCTGCAGAGAAGA
GAACCATGCCAGGGGAGAAAGGCACCCAGCCATCCTGACCCAGCGAGGAGCCAACCTATCCCAAATATACCTGGGGT
GAAATATACCAAATTCTGCATCTCCAGAGGAAAATAAGAAATAAAGATGAATTGTTGCAACTCTT

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FIGURE 4072

ACTGTACACATGCTAGGGTCCAGGACAGCAGGACCAAGCCAGCAGAAACAGCCTGAGCCCACCGCAGACTGGCCT
GGCTATACTGGACAATGCCACTCCTCCTGTACACCTGTCTTCTCTGGCTGCCCACCAGCGGCCTCTGGACCGTCC
AGGCCATGGATCCTAACGCTGCTTAATGTGAACATGAGTAACCATCACCGGGGCCTGGCTTCAGCCAACGTTGACT
TTGCCTTCAGCCTGTATAAGCACCTAGTGGCCTTGAGTCCCAAAAAGAACATTTTCATCTCCCTGTGAGCATCT
CCATGGCCTTAGCTATGCTGTCCCTGGGCACCTGTGGCCACACACGGGCCAGCTTCTCCAGGGCCTGGGTTTCA
ACCTCACTGAGAGGTCTGAGACTGAGATCCACCAGGGTTTCCAGCACCTGCACCAACTCTTTGCAAAGTCAGACA
CCAGCTTAGAAATGACCATGGGCAATGCCTTGTCTTGTATGGCAGCCTGGAGTTGCTGGAGTCATTCTCAGCAG
ACATCAAGCACTACTATGAGTCAGAGGTCTTGGCTATGAATTTCCAGGACTGGGCAACAGCCAGCAGACAGATCA
ACAGCTATGTCAAGAATAAGACACAGGGGAAAATTGTCGACTTGTTCAGGGCTGGATAGCCCAGCCATCCTCG
TCCTGGTCAACTATACTTCTTCAAAGGCACATGGACACAGCCCTTTGACCTGGCAAGCACCAGGGAGGAGAACT
TCTATGTGGACGAGACAACCTGTGGTGAAGGTGCCCATGATGTTGCAGTCGAGCACCATCAGTTACCTTCATGACT
CGGAGCTCCCCTGCCAGCTGGTGCAGATGAACCTACGTGGGCAATGGGACTGTCTTCTTCATCCTTCCGGACAAGG
GGAAGATGAACACAGTCATCGCTGCACTGAGCCGGGACACGATTAAACAGGTGGTCCGCAGGCCTGACCAGCAGCC
AGGTGGACCTGTACATTCCAAAGGTCACCATCTCTGGAGTCTATGACCTCGGAGATGTGCTGGAGGAAATGGGCA
TTGCAGACTTGTTACCAACCAGGCAAATTTCTCAGCATCACCCAGGACGCCCAGCTGAAGTCATCAAAGGTGG
TCCATAAAGCTGTGCTGCAACTCAATGAGGAGGGTGTGGACACAGCTGGCTCCACTGGGGTCACCCTAAACCTGA
CGTCCAAGCCTATCATCTTGCGTTTCAACCAGCCCTTCATCATCATGATCTTCGACCACTTCACCTGGAGCAGCC
TTTTCTGGCGAGGGTTATGAACCCAGTGTAAAGAGACCACCCACCCAGAGCCTCAGCACTGTCTGACTTTGGGAA
CCAGGGATCCACAGAAATGTTTTGGAGAGCGGGAGGTTTCCCCCAATCTCCTCCAAGTTCTTCTCCCTCCAACC
AGAGTTGTGTCTAACTTTAGGCATCTTTAATAAATGTCATTGCGACTCTG

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FIGURE 4073

GACAATGCCGTCTTCTGTCTCGTGGGGCATCCTCCTGCTGGCAGGCCTGTGCTGCCTGGTCCCTGTCTCCCTGGC
TGAGGATCCCCAGGGAGATGCTGCCCAGAAGACAGATACATCCCACCATGATCAGGATCACCCAACCTTCAACAA
GATCACCCCAACCTGGCTGAGTTCGCCTTCAGCCTATACCGCCAGCTGGCACACCAGTCCAACAGCACCAATAT
CTTCTTCTCCCCAGTGAGCATCGCTACAGCCTTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCACGATGA
AATCCTGGAGGGCCTGAATTTCAACCTCACGGAGATTCCGGAGGCTCAGATCCATGAAGGCTTCCAGGAACCTCCT
CCGTACCCTCAACCAGCCAGACAGCCAGCTCCAGCTGACCACCGGCAATGGCCTGTTCTCAGCGAGGGCCTGAA
GCTAGTGGATAAGTTTTTGGAGGATGTTAAAAAGTTGTACCACTCAGAAGCCTTCACTGTCAACTTCGGGGACAC
CGAAGAGGCCAAGAAACAGATCAACGATTACGTGGAGAAGGGTACTCAAGGGAAAATTGTGGATTTGGTCAAGGA
GCTTGACAGAGACACAGTTTTTGTCTGGTGAATTACATCTTCTTTAAAGGC AAAATGGGAGAGACCTTTGAAGT
CAAGGACACCGAGGAAGAGGACTTCCACGTGGACCAGGCGACCACCGTGAAGGTGCCTATGATGAAGCGTTTAGG
CATGTTTAAACATCCAGCACTGTAAGAAAGCTGTCCAGCTGGGTGCTGCTGATGAAATACCTGGGCAATGCCACCGC
CATCTTCTTCTGCTGCTGATGAGGGGAAACTACAGCACCTGGAAAATGAACTCACCCACGATATCATCACCAAGTT
CCTGGAAAATGAAGACAGAAGGTCTGCCAGCTTACATTTACCCAAACTGTCCATTACTGGAACCTATGATCTGAA
GAGCGTCTGGGTCAACTGGGCATCACTAAGGTCTTCAGCAATGGGGCTGACCTCTCCGGGGTCACAGAGGAGGC
ACCCCTGAAGCTCTCCAAGGCCGTGCATAAGGCTGTGCTGACCATCGACGAGAAAGGGACTGAAGCTGCTGGGGC
CATGTTTTTAGAGGCCATACCCATGTCTATCCCCCGAGGTCAAGTTCAACAAACCTTTGTCTTCTTAATGAT
TGAACAAAATACCAAGTCTCCCTCTTCAITGGGAAAAGTGGTGAATCCCACCCAAAAATAACTGCCTCTCGCTCC
TCAACCCCTCCCTCCATCCCTGGCCCCCTCCCTGGATGACATTAAAGAAGGGTTGAGCTGG

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FIGURE 4074

AGAACAAAGAACAGCCACCATGCAGCTCTTCCTCCTCTTGTGCCTGGTGCTTCTCAGCCCTCAGGGGGCCTCCCT
TCACCGCCACCACCCCGGGAGATGAAGAAGAGAGTCGAGGACCTCCATGTAGGTGCCACGGTGGCCCCAGCAG
CAGAAGGGACTTTACCTTTGACCTCTACAGGGCCTTGGCTTCCGCTGCCCCCAGCCAGAGCATCTTCTTCTCCCC
TGTGAGCATCTCCATGAGCCTGGCCATGCTCTCCCTGGGGGCTGGGTCCAGCACAAAGATGCAGATCCTGGAGGG
CCTGGGCCTCAACCTCCAGAAAAGCTCAGAGAAGGAGCTGCACAGAGGCTTTCAGCAGCTCCTTCAGGAACTCAA
CCAGCCCAGAGATGGCTTCCAGCTGAGCCTCGGCAATGCCCTTTTCACCGACCTGGTGGTAGACCTGCAGGACAC
CTTCGTAAGTGCCATGAAGACGCTGTACCTGGCAGACACTTTCCTTACCAACTTTAGGGACTCTGCAGGGGGCCAT
GAAGCAGATCAATGATTATGTGGCAAAGCAAACGAAGGGCAAGATTGTGGACTTGCTTAAGAACCTCGATAGCAA
TGCGGTCGTGATCATGGTGAATTACATCTTCTTTAAAGCTAAGTGGGAGACAAGCTTCAACCACAAAGGCACCCA
AGAGCAAGACTTCTACGTGACCTCGGAGACTGTGGTGCGGGTACCCATGATGAGCCGCGAGGATCAGTATCACTA
CCTCCTGGACCGGAACCTCTCCTGCAGGGTGGTGGGGGTCCCTACCAAGGCAATGCCACGGCTTTGTTTATTCT
CCCCAGTGAGGGAAAGATGCAGCAGGTGGAGAATGGACTGAGTGAGAAAACGCTGAGGAAGTGGCTTAAGATGTT
CAAAAAGAGGCAGCTCGAGCTTTACCTTCCCAAATTCTCCATTGAGGGCTCCTATCAGCTGGAGAAAAGTCTCCC
CAGTCTGGGGATCAGTAACGTCTTCACCTCCCATGCTGATCTGTCCGGCATCAGCAACCACTCAAATATCCAGGT
GTCTGAGATGGTGCACAAAGCTGTGGTGGAGGTGGACGAGTCGGGAACCAGAGCAGCGGCAGCCACGGGGACAAT
ATTCACCTTTCAGGTCGGCCCGCCTGAACCTCTCAGAGGCTAGTGTTCAACAGGCCCTTTCTGATGTTTATTGTGGA
TAACAACATCCTCTTCCTTGGCAAAGTGAACCGCCCCCTGA

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FIGURE 4075

CAGAGTTGAGAAATGGAGAGAAATGTTACCTCTCCTGGCTCTGGGGCTCTTGGCGGCTGGGTTCTGCCCTGCTGTCC
TCTGCCACCCCTAACAGCCCACTTGACGAGGAGAATCTGACCCAGGAGAACCAAGACCGAGGGACACACGTGGACC
TCGGATTAGCCTCCGCCAACGTGGACTTCGCTTTAGCCTGTACAAGCAGTTAGTCCTGAAGGCCCTGATAAGA
ATGTCATCTTCTCCCACTGAGCATCTCCACCGCCTTGGCCTTCTGTCTCTGGGGGCCATAATACCACCCTGA
CAGAGATTCTCAAAGGCCTCAAGTTCAACCTCACGGAGACTTCTGAGGCAGAAATTCACCAGAGCTTCCAGCACC
TCCTGCGCACCCCTCAATCAGTCCAGCGATGAGCTGCAGCTGAGTATGGGAAATGCCATGTTTGTCAAAGAGCAAC
TCAGTCTGCTGGACAGGTTACGGAGGATGCCAAGAGGCTGTATGGCTCCGAGGCCTTTGCCACTGACTTTCAGG
ACTCAGCTGCAGCTAAGAAGCTCATCAACGACTACGTGAAGAATGGAAGTGGGGGAAAATCACAGATCTGATCA
AGGACCTTGACTCGCAGACAATGATGGTCCTGGTGAATTACATCTTCTTTAAAGCCAAATGGGAGATGCCCTTTG
ACCCCCAAGATACTCATCAGTCAAGGTTCTACTTGAGCAAGAAAAAGTGGGTAATGGTGCCCATGATGAGTTTGC
ATCACCTGACTATACCTTACTTCCGGGACGAGGAGCTGTCTGCACCGTGGTGGAGCTGAAGTACACAGGCAATG
CCAGCGCACTCTTCATCCTCCCTGATCAAGACAAGATGGAGGAAGTGGAAGCCATGCTGCTCCAGAGACCCCTGA
AGCGGTGGAGAGACTCTCTGGAGTTCAGAGAGATAGGTGAGCTCTACCTGCCAAAGTTTTCCATCTCGAGGGACT
ATAACCTGAACGACATACTTCTCCAGCTGGGCATTGAGGAAGCCTTCACCAGCAAGGCTGACCTGTCAGGGATCA
CAGGGGCCAGGAACCTAGCAGTCTCCCAGGTGGTCCATAAGGCTGTGCTTGATGTATTTGAGGAGGGCACAGAAG
CATCTGCTGCCACAGCAGTCAAAATCACCCCTCCTTTCTGCATTAGTGGAGACAAGGACCATTGTGCGTTTCAACA
GGCCCTTCTGATGATCATTGTCCCTACAGACACCCAGAACATCTTCTTCATGAGCAAAGTCACCAATCCCAAGC
AAGCCTAGAGCTTGCCATCAAGCAGTGGGGCTCTCAGTAAGGAACCTTGGAATGCAAGCTGGATGCCTGGGTCTCT
GGGCACAGCCTGGCCCTGTGCACCGAGTGGCCATGGCATGTGTGGCCCTGTCTGCTTATCCTTGGAAGGTGACA
GCGATTCCCTGTGTAGCTCTCACATGCACAGGGGCCATGGACTCTTCAGTCTGGAGGGTCCTGGGCCTCCTGAC
AGCAATAAATAATTTTCGTTGG

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FIGURE 4076

MERMLPLLALGLLAAGFCPAVLCHPNSPLDEENLTQENQDRGTHVDLGLASANVDFAFSLYKQLVLKAPDKNVIF
SPLSISTALAFSLGHNHTTLTEILKGLKFNLTTETSEAEIHQS FQHLLRTLNQSSDELQLSMGNAMFVKEQLSLL
DRFTEDAKRLYGSEAFATDFQDSAAAKKLINDYVKNGTRGKITDLIKDLDSQTMMLVNYIFFKAKWEMPFDPQD
THQSRFYLSKKKWVMVPMMSLHHLTIPYFRDEELSCTVVELKYTGNASALFILPDQDKMEEVEAMLLPETLKRWR
DSLEFREIGELYLPKFSISRDNLDILLQLGIEEAFTSKADLSGITGARNLAVSQVVHKAVLDVFEEGTEASAA
TAVKITLLSALVETRITIVRFNRPFMIIVPTDTQNIFFMSKVTNPKQA

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FIGURE 4077

TTTCCGCGCTACCTACAGAGGGGTCCATACAGCGTCGTTCTGGATTCCCGTCGTAACTTAAAGGGAACTTTTCAC
AATGTCTGGAGCGCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGTAGCAGGAACCCACTT
AGGTGGCACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTATATCATAAA
TCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCTATTATTGCTATTGAAAACCCTGCTGATGTCAG
TGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGAAGCCACTCCAATTGC
TGGTCACTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGACTTCTGGGAGCCAAGGCTTCTTGTGGTTAC
TGACCCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTGTGTAACAC
AGATTCTCCTCTGCGCTATGTGGACATTGCCATTCCATGCAACAACCAGGGAGCTCGCTCAGTGGGTTTGATGTG
GTGGACGCTGGCTCGGGAAGTTCTGCGCATGCGTGGCACCATTTCTCGTGAACACCTATGGGAGGTCATGCCTGA
TCTCTACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGGCTGCTACTGAAAAGGCAGTGACCAAGGA
GGAATTTACAGGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTAAGCCTGAGGTTGCAGACTGGTCTGA
AGGTGTACAGGTGCCCTCTGTGCCTATTCACTAGTTCCCTACTGAAGACAGGAGTGCTCAGCCTGCCATGGAAGA
CTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGACTGGTCTTTAAGCTGTTCTTGC
ATAGGCTCTTAAGCAACACGGAAAAATGATTGGCGGAAAATAAACATCAGTTTCT

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FIGURE 4078

MSGALDVLQMKEEDVLKFLVAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAI IAIENPADVS
VISSRNTGQRAVLKFAAAATEATPIAGHFTP GTFTN QIQADFWEPRLLVVTDPRADHQPLTEASYVNLPTIALCNT
DSPLRYVDIAIPCNNQGARSVGLMWWTLAREVLRMRGTISREHLWEVMPDLYFYRDPEEIEKEEQAAATEKAVTKE
EFQGEWTAPAPEFTATKPEVADWSEGVQVPSVPIQSSLLKTGVLSLPWK TGLQLP LLRPLNGVGATTDWS

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FIGURE 4079

CTTGAGAGGCTCTGGCTCTTGCTTCTTAGGCGGCCCGAGGACGCCATGGCCGAGTGCCCGACACTCGGGGAGGCA
GTCACCGACCACCCGGACCGCCTGTGGGCCTGGGAGAAGTTCGTGTATTTGGACGAGAAGCAGCACGCCTGGCTG
CCCTTAACCATCGAGATAAAGGATAGGTTACAGTTACGGGTGCTCTTGCGTCGGGAAGACGTCGTCCTGGGGAGG
CCTATGACCCCCACCCAGATAGGCCCAAGCCTGCTGCCTATCATGTGGCAGCTCTACCCTGATGGACGATACCGA
TCCTCAGAGTCCAGTTTCTGGCGCTTAGTGTACCACATCAAGATTGACGGCGTGGAGGACATGCTTCTCGAGCTG
CTGCCAGATGACTGATGTATGGTCTTGGCAGCACCTGTCTCCTTTACCCCCAGGGCCTGAGCCTGGCCAGCCTAC
AATGGGGATGTTGTGTTTCTGTTACCTTCGTTTACTATGCCTGTGTCTTCTCCACCACGCTGGGGTCTGGGAGG
AATGGACAGACAGAGGATGAGCTCTACCCAGGGCCTGCAGGACCTGCCTGTAGCCCACTCTGCTCGCCTTAGCAC
TACCACTCCTGCCAAGGAGGATTCCATTTGGCAGAGCTTCTTCCAGGTGCCCAGCTATACCTGTGCCTCGGCTTT
TCTCAGCTGGATGATGGTCTTCAGCCTCTTTCTGTCCCTTCTGTCCCTCACAGCACTAGTATTTTCATGTTGCACA
CCCACTCAGCTCCGTGAACCTTGTGAGAACACAGCCGATTACCTGAGCAGGACCTCTGAAACCCTGGACCAGTGG
TCTCACATGGTGCTACGCCTGCATGTAAACACGCCTGCAAACGCTGCCTGCCGGTAAACACGCCTGCAAACGCTG
CCTGCCCCGTAAACACGCCTGCAAACGCTGCCTGCCACACAGGTTACGTGCAGCTCAAGGAAAGGCCTGAAAGG
AGCCCTTATCTGTGCTCAGGACTCAGAAGCCTCTGGGTCA GTGGTCCACATCCCGGGACGCAGCAGGAGGCCAGG
CCGGCGAGCCCTGTGGATGAGCCCTCAGAACCCTTGGCTTGCCACGTGGAAAAGGGATAGAGGTGGGTTTCCC
CCCTTTATAGATGGTCACGCACCTGGGTGTTACAAAGTTGTATGTGGCATGAATACTTTTTGTAATGATTGATTA
AATGCAAGATAGTTTATCTAACTTCGTGCGCAATCAGCTTCTATCCTTGA CTTAGATTCTGGTGGAGAGAAGTGA
GAATAGGCAGCCCCCAAATAAAAAATATTCATGGAAAAAAAAAAAAAAAAA

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FIGURE 4080

MAECPTLGEAVTDHPDRLWAWKEFVYLDEKQHAWLPLTIEIKDRLQLRVLLRREDVVLGRPMTPTQIGPSLLPIM
WQLYPDGRYRSDSSFWRLVYHIKIDGVEDMLELLPDD

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FIGURE 4081

TGAAAATGCCTCGTGTAAGCAGCTCAAGCTGGAAGACAGAGCTCTGCAAAGAGACATCTTGCAGAACAATTTG
CAGTTGGAGAGATAATAACTGACATGGCAAAAAAGGAATGGAAAGTAGGATTACCCATTGGCCAAGGAGGCTTTG
GCTGTATATATCTTGCTGATATGAATTCTTCAGAGTCAGTTGGCAGTGATGCACCTTGTGTTGTAAAAGTGGAAAC
CCAGTGACAATGGACCTCTTTTTACTGAATTAAAGTTCTACCAACGAGCTGCAAAACCAGAGCAAATTCAGAAAT
GGATTTCGTACCCGTAAGCTGAAGTACCTGGGTGTTCTTAAGTATTGGGGGTCTGGTCTACATGACAAAAATGGAA
AAAGTTACAGGTTTATGATAATGGATCGCTTTGGGAGTGACCTTCAGAAAATATATGAAGCAAATGCCAAAAGGT
TTTCTCGGAAAACGTGCTTGCAGCTAAGCTTAAAGATTCTGGATATTCTGGAATATATTACAGAGCATGAGTATG
TGCATGGAGATATCAAGGCCTCAAATCTTCTTCTGAACCTACAAGAATCCTGACCAGGTGTACTTGGTAGATTATG
GCCTTGCTTATCGGTACTGCCCAGAAGGAGTTCATAAAGAATACAAAGAAGACCCCAAAAGATGTCACGATGGCA
CTATTGAATTCACGAGCATCGATGCACACAATGGCGTGGCCCCATCAAGACGTGGTGATTTGGAAATACTTGGTT
ATTGCATGATCCAATGGCTTACTGGCCATCTTCCTTGGGAGGATAATTTGAAAGATCCTAAATATGTTAGAGATT
CCAAAATTAGATACAGAGAAAATATTGCAAGTTTGATGGACAAATGTTTTCTTGAGAAAAACAAACCAGGTGAAA
TTGCCAAATACATGGAAACAGTGAAATTACTAGACTACACTGAAAAACCTCTTTATGAAAATTTACGTGACATTC
TTTTGCAAGGACTAAAAGCTATAGGAAGTAAGGATGATGGCAAATTTGGACCTCAGTGTTGTGGAGAATGGAGGTT
TGAAAGCAAAAACAATAACAAAGAAGCGAAAGAAAGAAATTGAAGAAAGCAAGGAACCTGGTGTTGAAGATACGG
AATGGTCAAACACACAGACAGAGGAGGCCATACAGACCCGTTCAAGAACCAGAAAGAGAGTCCAGAAGTAATTCA
GATGCTGTGAACCAGATTTCTTTTCTTTGTTTTCTTTTGACTTTTTTCTCCTTTTCTATTTGAACTGTTTTATT
TTCCTGTGAGTCTTGCGAGGTGGAAGTAATGATTAAATACTCATGTGTTTCAGAAAACATAAACTTTTTTTATAAA
AATATTTTGTACAATTCATTAAAGGCTAATTTATGAAATTTGAAAATCTTCAGGTTATACTCCTTAAGTTATCCC
AAAGCCGTGTGTTTGTGATGTTTGGAGTACATATATATGAAAATTATTATGACACGCACTTTTCTAATCATTGT
ACATTTCTCAGAGTGGATAAAAAATGTTTGACAAAGTCCTCACTTTTAAGGAAATGCAAAGCTTAAAATAAACTC
TCTTTTGTGATGCA

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FIGURE 4082

ATGCCTGCTGCTGCGCTTCCGAGGCAGGAAGCCGAGGGACCCATGTCTGGGAGCGGAGAACTTTCTGTGAGACAT
CACGCCATCAAATTCTCTGTGGCACGCGCTGGGCAGAAAGGCTACCATCACCGCACTGAGATCAACAAGAAGATC
TATAAGATTGGCCAGGGCTACCTTATCAAGGATGGCAAGCTGATCAAGAACAATGCCTCCACTGACTATGACCTA
TCTGACAAGAGCATCAACCCTCTGGGTGGCTTTGTCCACTATGGTGAAGTGACCAATGACTTTGTTCATGCTGAAA
GGCTGTGTGGTGGGAACCAAGAAGCGGGTGCTCACCTCCGCAAGTCCTTGCTGGTGCAGACGAAGCGGCGGGCT
CTGGAGAAGATTGACCTTAAGTTCATTGACACCACCTCCAAGTTTGGCCATGGCCGCTTCCAGACCATGGAGGAG
AAGAAAGCATTTCATGGGACCACTGAAGAAAGACCGAATTGCAAAGGAAGAAGGAGCTTAA

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FIGURE 4083

MPAAALPRQEAEGPMSGSGELSVRHHAIKFSVARAGQKGYHHRTEINKKIYKIGQGYLIKDGKLIKNNASTDYDL
SDKSINPLGGFVHYGEVTNDFVMLKGCVVGTKKRVLTLRKSLLVQTKRRALEKIDLKFDITTSKFGHGRFQTMEE
KKA FMGPLKKDRIAKEEGA

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FIGURE 4084

CTATGATGATTTGTAGGGTGGCACCTTTTTATCCAAGTTACTAGCTACACATCAGTGTTTAAAGAGAAAAAAGTG
ACCTTTCATTTTTTTTTTCTTGAACTTGAGGAAACAAGATACATACTACTGATTTTTTTTTTCTTAAACTAA
ATGCATGACTGCAGAGCGGTAGAGGTGTATATTTTCATACTGTGGGGCAAAGTATTTGTGCTGCTTTTTGGAGA
TGGACTGGAACGTCTGGTTTCTGTCCCCGGGCCCGGCAGCTACGTCTATTTCTGTAGAAGGTGCCACAGTGAGA
CCTGGAGCCACCCCTTCCTGCCCTGGCGCCGTTTAGAGCTGGGAGCCCGTGGACTCCCGGCCTGTTTCTACCTTC
TATTTCAACCCTCTGACGTGGGGAGACAAGAAGAAATAGAACTTTTTGATAGTGTGGTAAAAACATTGATTTGAA
CTATTTTAGTAAAAGGAGTAACAAACAAGATTGTGATAGTGTCTACTTTGAGCTAGATAAATAAAGGCCTCTTTG
TGAGCCTCCTGGCTGGGTGCTCAGTGCTTGTTTCTGTCTGGGTGGCAGGGTCAGCAGGCAGAGACAGGGCCAAG
GCCCCCTCAAGCACCGCAGATGGGGGCTCAGTCGGGGCCCCCTTCCACAGACAGAGCCGTGGCCCCCTCAAGGTGGAC
AGTGAGGCCGCTGCTCCTCCAGCTGCCTCTGTCTCATCACAGGCCAGAAGTGGAAGGGTTTCAAATCCAAGCCC
CCGGGTTCCTGTGTGCGTTCTACGCAGCAAGGCTTCAAAGTTTCAAACCTGGTTTGGAACCTCAACCAGGTCTCCA
AAGGAAACCAAGGCAGGCACAGGATGGGGGCAGGCTGGCTTGGCAGGCAGCTGTGCGGATCCACCCAGAGTGCCT
TGGGAGGCAGTGGGGTTGGCTGTGGCTGCTGTGAGCTGCAGCCAGGCCTCTCCCGCGTCCCCAGGGTCTGGAAGG
AGGGCCTCTGCACATTTTATAAGCCACAGACTGCGAAGGCCTGGAGCCCCACCTTCCACCCATAACAAAGAAAGG
GATAGTTTCAGAACTGCTTTTATTTGGATAACTGACTGAAGGAGTCTCATTTGTAACCAAGATGGAATTCACAGT
ATGTTGTTACATTCACACTTAAAAAATATATCTCTATGTACAGGAATTTGCAAAGAGATGTAAACATACATTAAT
TTCCAAGTACATTTCTCCCTTCTCCCTGGAGGAAAAAAAAAAAAAGCCATCCAATGAGGCAACCCCTTCAAATAA
TTTTAATACAAAGGATGCAAAACATCAAAAAAAAAAAAAA

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FIGURE 4085

MGAQSGPLPQTEPWPLKVDSEAAAPPAASVSSQARSGKGFKSKPPGSCVRSTQQGFKVSNWFGTQPGPPKETKAG
TGWGQAGLAGSCADPPRPWEAVGLAVAAVSCSQASPASPGSGRRASAHFISHRLRRPGAPPSTHNKERDSFRTA
FIWITD

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FIGURE 4086

GAAAGAAAGAGGGGAAGAGTATTAAAGACCATTCTGGCTGGGCAGGGCACTCTCAGCAGCTCAACTGCCCAGCG
TGACCAGTGGCCACCTCTGCAGTGTCTTCCACAACCTGGTCTTGACTCGTCTGCTGAACAAATCCTCTGACCTCA
GGCCGGCTGTGAACGTAGTTCCCTGAGAGATAGCAAACATGCCCAACAGTGAGCCCGCATCTCTGCTGGAGCTGTT
CAACAGCATCGCCACACAAGGGGAGCTCGTAAGGTCCCTCAAAGCGGGAAATGCGTCAAAGGATGAAATTGATTC
TGCAGTAAAGATGTTGGTGTCTATTAATAATGAGCTACAAAGCTGCCGCGGGGAGGATTACAAGGCTGACTGTCC
TCCAGGGAACCCAGCACCTACCAGTAATCATGGCCAGATGCCACAGAAGCTGAAGAGGATTTTGTGGACCCATG
GACAGTACAGACAAGCAGTGCAAAAGGCATAGACTACGATAAGCTCATTGTTTCGGTTTGGAAAGTAGTAAATTGA
CAAAGAGCTAATAAACCGAATAGAGAGAGCCACCGGCCAAAGACCACACCACTTCCTGCGCAGAGGCATCTTCTT
CTCACACAGAGATATGAATCAGGTTCTTGATGCCTATGAAAAATAAGAAGCCATTTTATCTGTACACGGGCGGGG
CCCCTCTTCTGAAGCAATGCATGTAGGTACCTCATTCCATTTATTTTACAAAGTGGCTCCAGGATGTATTTAA
CGTGCCCTTGGTCATCCAGATGACGGATGACGAGAAGTATCTGTGGAAGGACCTGACCCTGGACCAGGCCTATAG
CTATGCTGTGGAGAATGCCAAGGACATCATCGCTGTGGCTTTGACATCAACAAGACTTTTCATATTCTCTGACCT
GGACTACATGGGGATGAGCTCAGGTTTCTACAAAAATGTGGTGAAGATTCAAAGCATGTTACCTTCAACCAAGT
GAAAGGCATTTTCGGCTTCACTGACAGCGACTGCATTGGGAAGATCAGTTTTCTGCCATCCAGGCTGCTCCCTC
CTTCAGCAACTCATTCCCACAGATCTCCGAGACAGGACGGATATCCAGTGCCTTATCCCATGTGCCATTGACCA
GGATCCTTACTTTAGAATGACAAGGGACGTCGCCCCCAGGATCGGCTATCCTAAACCAGCCCTGCTGCACTCCAC
CTTCTTCCCAGCCCTGCAGGGCGCCAGACCAAAATGAGTGCCAGCGACCCCAACTCCTCCATCTTCTCACCGA
CACGGCCAAGCAGATCAAACCAAGGTCAATAAGCATGCGTTTTCTGGAGGGAGAGACACCATCGAGGAGCACAG
GCAGTTTGGGGCAACTGTGATGTGGACGTGTCTTTCATGTACCTGACCTTCTTCTCGAGGACGACGACAAGCT
CGAGCAGATCAGGAAGGATTACACCAGCGGAGCCATGCTCACCGGTGAGCTCAAGAAGGCACTCATAGAGGTTCT
GCAGCCCTTGATCGCAGAGCACCAGGCCCGCGCAAGGAGGTACGGATGAGATAGTGAAAGAGTTTCATGACTCC
CCGGAAGCTGTCTTCGACTTTCAGTAGCACTCGTTTTACATATGCTTATAAAAGAAGTGATGTATCAGTAATGT
ATCAATAATCCCAGCCCAGTCAAAGCACCGCCACCTGTAGGCTTCTGTCTCATGGTAATTACTGGGCCTGGCCTC
TGTAAGCCTGTGTATGTTATCAATACTGTTTCTTCTGTGAGTTCCATTATTTCTATCTCTTATGGGCAAAGCAT
TGTGGGTAATTGGTGTGGCTAACATTGCATGGTCGGATAGAGAAGTCCAGCTGTGAGTCTCTCCCAAAGCAGC
CCCACAGTGGAGCCTTTGGCTGGAAGTCCATGGGCCACCTGTTCTTGTCCATGGAGGACTCCGAGGGTTCCAAG
TATACTCTTAAGACCCACTCTGTTTAAAAATATATATTCTATGTATGCGTATATGGAATTGAAATGTCATTATTG
TAACCTAGAAAGTGCTTTGAAATATTGATGTGGGGAGGTTTATTGAGCACAGATGTATTTTCAGCCCATGCCCCC
TCCCAAAAAGAAATTGATAAGTAAAGCTTCGTTATACATTTGACTAAGAAATCACCCAGCTTTAAAGCTGCTTT
TAACAATGAAGATTGAACAGAGTTCAGCAATTTTATTAATAAAGACTTGGGGGTGAACTTTCCAGTTTACTG
AACTCCAGACCATGCATGTAGTCCACTCCAGAAATCATGCTCGCTTCCCTTGGCACACCAAGTGTCTCCTGCCAA
ATGACCCTAGACCCTCTGTCTGCAGAGTCAGGGTGGCTTTTCCCTGACTGTGTCCGATGCCAAGGAGTCCTGG
CCTCCGAGATGCTTCAATTTGACCCTTGGCTGCAGTGGAAGTCAGCACAGAGCAGTGCCCTGGCTGTGTCCCTG
GACGGGTGGACTTAGCTAGGGAGAAAGTCAGGCAGCAGCCCTCAGGGCCCTCACAGATGTCTAGGCAGGCCTCA
TTTCATCACGCAGCATGTGCAGGCCTGGAAGAGCAAAGCCAAATCTCAGGGAAGTCCTTGGTTGATGTATCTGGG
TCTCCTCTGGAGCACTCTGCCCTCCTGTACCCAGTAGAGTAAATAAACTTCCTTGGCTCCT

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FIGURE 4087

MPNSEPASLLELFNSIATQGELVRSCLKAGNASKDEIDS AVKMLVSLKMSYKAAAGEDYKADCPPGNPAPTSNHGP
DATEAEEDFVDPWTVQTSSAKGIDYDKLIVRFGSSKIDKELINRIERATGQRPHHFLRRGIFFSHRDMNQVLDAY
ENKKPFYLYTGRGPSSEAMHVGHLPFFIFTKWLQDVFNVPLVIQMTDDEKYLWKDLTLDQAYS YAVENAKDI IAC
GFDINKTFIFSDLDYMGMSGGFYKNVVKIQKHVTFNQVKGIFGFTDSDCIGKISFP AIQAAPSFNSFPQIFRDR
TDIQCLIPCAIDQDPYFRMTRDVAPRIGYPKPALLHSTFFPALQGAQTKMSASDPNSSIFLTD TAKQIKTKVKNKH
AFSGGRDTIEEHRQFGGNCDDVDVSFMYLTFFLEDDDKLEQIRKDYTS GAMLTGELKKALIEVLQPLIAEHQARRK
EVTDEIVKEFMTPRKLSFDFQ

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FIGURE 4088

GGCACGAGGGAGAGCGCAGCGCGCAGCCCGGTGCAGCCCTGGCTTTCCCTCGCTGCGCGCCCGCGCCCCCTTTC
GCGTCCGCAACCAGAAGCCCAGTGC GGCGCCAGGAGCCGACCCGCGCCCGCACCGCTCCCGGGACCGCGACCCC
GGCCGCCCAGAGATGACCGCGACCGAAGCCCTCCTGCGCGTCTCTTGCTCCTGCTGGCTTTTCGGCCACAGCACC
TATGGGGCTGAATGCTTCCCGGCCTGCAACCCCAAAATGGATTCTGCGAGGATGACAATGTTTGCAGGTGCCAG
CCTGGCTGGCAGGGTCCCCTTTGTGACCACTGCGTGACCTCTCCCGGCTGCCTTCACGGACTCTGTGGAGAACCC
GGGCAGTGCATTTGCACCGACGGCTGGGACGGGGAGCTCTGTGATAGAGATGTTTCGGGCCTGCTCCTCGGCCCCC
TGTGCCAACAACGGGACCTGCGTGAGCCTGGACGATGGCCTCTATGAATGCTCCTGTGCCCCCGGGTACTCGGGA
AAGGACTGCCAGAAAAAGGACGGGCCCTGTGTGATCAACGGCTCCCCCTGCCAGCACGGAGGCACCTGCGTGGAT
GATGAGGGCCGGGCCTCCCATGCCTCCTGCCTGTGCCCCCTGGCTTCTCAGGCAATTTCTGCGAGATCGTGGCC
AACAGCTGCACCCCCAACCCTATGCGAGAACGACGGCGTCTGCACTGACATCGGGGGCGACTTCCGCTGCCGGTGC
CCAGCCGGCTTCATCGACAAGACCTGCAGCCGCCCGGTGACCAACTGCGCCAGCAGCCCGTGCCAGAACGGGGC
ACCTGCCCTGCAGCACACCCAGGTGAGCTACGAGTGTCTGTGCAAGCCCGAGTTCACAGGTCTCACCTGTGTCAAG
AAGCGCGCGCTGAGCCCCCAGCAGGTACCCGCTCTGCCCAACGGCTATGGGCTGGCCTACCGCCTGACCCCTGGG
GTGCACGAGCTGCCGGTGCAGCAGCCGGAGCACCGCATCCTGAAGGTGTCCATGAAAGAGCTCAACAAGAAAACC
CCTCTCCTCACCAGGGGCCAGGCCATCTGCTTCACCATCCTGGGCGTGCTCACCAGCCTGGTGGTGTCTGGGCACT
GTGGGTATCGTCTTCTCAACAAGTGCAGACCTGGGTGTCCAACCTGCGCTACAACCACATGCTGCGGAAGAAG
AAGAACCTGCTGCTTCAGTACAACAGCGGGGAGGACCTGGCCGTCAACATCATCTTCCCGAGAAGATCGACATG
ACCACCTTCAGCAAGGAGGGCCGGCGACGAGGAGATCTAAGCAGCGTTCCACAGCCCCCTCTAGATTCTTGGAGT
TCCTCAGAGCTTACTATACGCGGTCTGTCTTAATCTTTGTGGTGTTCGCTATCTCTTGTGTCAAATCTGGTGAAC
GCTACGCTTACATATATTGTCTTTGTGCTGCTGTGTGACAAACGCAATGCAAAAACAATCCTCTTTCTCTCTTT
AATGCATGATACAGAATAATAATAAGAATTTTCATCTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 4089

MTATEALLRVLLLLLAFGHSTYGAECPACNPQNGFCEDDNVCRCQPGWQGPLCDQCVTSPGCLHGLCGEPGQCI
CTDGWDGELCDRDVRACSSAPCANNGTCVSLDDGLYECSCAPGYSGKDCQKKDGPCVINGSPCQHGGTCVDDEGR
ASHASCLCPPGFSGNFCEIVANSCTPNPCENDGVCTDIGGDFRCRCPAGFIDKTCSRPTVNCASSPCQNGGTCLQ
HTQVSYECLCKPEFTGLTCVKKRALSPQQVTRLPNGYGLAYRLTPGVHELFPVQQPEHRILKVSMKELNKKTPLLT
EGQAICFTILGVLTSLVVLGTVGIVFLNKCETWVSNLRYNHMLRKKKNLLQYNSGEDLAVNIIFPEKIDMTTFS
KEAGDEEI

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FIGURE 4090A

CTGGTTTCTTGCCTTAAGGAGCCCATTGCCTTTCCCGCTGAAGTCTAGATGTTGACATGTAATAAAGCGGGCAGC
AGGATGGTGGTGGATGCGGCCAACTCCAATGGGCCTTTCCAGCCCCTGGTCCTTCTCCATATTCGAGATGTTCTCT
CCTGCTGATCAAGAGAAGCTTTTTATCCAGAAGTTACGTCAAGTGTTCGCTCCTCTTTGACTTTGTTTCTGATCCA
CTAAGTGACCTAAAGTGGAAGGAAGTAAAACGAGCTGCTTTAAGTGAAATGGTAGAATATATCACCCATAATCGG
AATGTGATCACAGAGCCTATTTACCCAGAAGTAGTCCATATGTTTGACAGTTAACATGTTTCGAACATTACCACCT
TCCTCCAATCCTACGGGAGCGGAATTTGACCCGGAGGAAGATGAACCAACGTTAGAAGCAGCCTGGCCTCATCTA
CAGCTTGTTTATGAATTTTTCTTAAGATTTTATAGAGTCTCCAGATTTCCAACCTAATATAGCGAAGAAATATATT
GATCAGAAGTTTGTATTGCAGCTTTTAGAGCTCTTTGACAGTGAAGATCCTCGGGAGAGAGATTTTCTTAAACC
ACCTTTCACAGAATCTATGGGAAATTCCTAGGCTTGAGAGCTTACATCAGAAAACAGATAAAATAATATATTTTAT
AGGTTTATTTATGAACAGAGCATCATAATGGCATAGCAGAGTTACTGGAAATATTGGGAAGTATAATTAATGGA
TTTGCTTACCCTAAAAGAGAGCACAAGATTTCTTATTGAAGGTGTACTACCTTTGCACAAAGTGAAATCT
CTGAGTGTCTACCATCCCCAGCTGGCATACTGTGTAGTGCAGTTTTTAGAAAAGGACAGCACCTCAGCGAACCA
GTGGTGATGGCACTTCTCAAATACTGGCCAAAGACTCACAGTCCAAAAGAAAGTAATGTTCTTAAACGAATTAGAA
GAGATTTTAGATGTCATTGAACCATCAGAATTTGTGAAGATCATGGAACCCCTCTTCCGGCAGTTGGCCAAATGT
GTCTCCAGCCCACACTTCCAGGTGGCAGAGCGAGCTCTCTATTACTGGAATAATGAATACATCATGAGTTTAAATC
AGTGACAACCGCAGCGAAGATTCTGCCCATCATGTTTCTTCTGTACCGCAACTCAAAGACCCATTGGAACAAG
ACAATACATGGCTTGATATACAACGCCCTGAAGCTCTTCATGGAGATGAACCAAAAGCTATTTGATGACTGTACA
CAACAGTTCAAAGCAGAGAACTAAAAGAGAAAGCTAAAAATGAAAGAACGGGAAGAAGCATGGGTTAAAATAGAA
AATCTAGCCAAAGCCAATCCCCAGTACACAGTGTATAGTCAAGCCAGCACCATGAGCATTCCGGTTGCAATGGAG
ACAGATGGGCTTTATTTGAAGATGTGCAGATGCTGAGAAAGACAGTGAAGGACGAGGCTCATCAGGCACAGAAA
GATCCGAAGAAGGACCGTCTCTTGACGCGCGCAAGTCCGAGCTGCCTCAGGACCCCCACACCAAGAAAGCCTTG
GAAGCTCACTGCAGGGCCGATGAGCTGGCCTCCAGGACGGCCGCTAGCCTCCGGGGCGCCGCGTCCGGGGCCGGG
CCCGCCAGTCTTTTCCGATTCTGTAGAAAATACATACTTCTGTGCCATACCAATCAGTTACACTCAAAGCTT
TCTTGACCCCGTTCCTAGGCAATAACGTGCGTCCGCTCAGCGCGAGATTAGGAGTTCAAACAATGGTGACTT
CCAGAGCCCCGCTGGCAGAGCCGCGGGTTGACGACGGTGTCTCGCAGTGTGCGCGCCACCCAGCGTAGTCCAA
GTCAGACTATTTACAAAAGTCAGAGCGATAGGAAAGCACCTGCCCTTCATCTTCATGTTCTCCCAAATGGAAT
TAGGATCTTTTAACATAGTTGTTCTGTGATAACATCAGTGTGTTTCCAAATCAAAGGAACGCTTTAAAAATAGG
ACCTATTTTTTAAGACTTTACAGCCTTTGAAATGGTTTCCAGTGTATTGTTACGCCAGCAGTTCTGCTTTTGT
GTTTTTCAAICTCAGTGAATGGCTCTTTGCTTTGAGTTCTCAGCAACGTACTGGGCAATGCAATCCTCAG
CCGCTGGTATTTTTCTAAGGGGTCTCTTCACTTTGATGAGTGACATGAACACCGTGTCTCCTTCTTGTGTGTAC
CTAAAGCCATATTTCCAAGTCTGTGGTACTCCAGGATTCCAGGAGTAAGCCTGTAGAAGAGATTTATTTTAAAG
AGATTGCTCTGAAATTTATCTTAAAGAGCTTGCTCTGTCTACCTTGACAGAAATTGGAGTTTTTAAATTTATGTG
TTAATATTTTTATTTGCAGATTTTCGTTTCCGTCAACTTAAACATTGTTGCCCTTCAACAAGGCTCTTGAATTAAT
AAAATTATAGTCTCTAAGAATTCCACATTTTATGGAAGTTAGAGCAAAATCATTTTGAGTTAAGCCAGTTCTTA
GCCTAATGCAAACTGCAGCGCCTTTAAGCATAAAGTAACACAACAGCATTGCACGGGGCCGGCACTGCCGCTGCC
TTCACTGAAGGCTGCAGTGTCTGTTCTGAGAGCTTGAGGAGGACACCAGCGAGGATGACGTTTAGTGGAGCTCTT
CTGTTGAAAAGAGCTCACGTTATCAACACCTTGTAAGGAAAATACAGTGTCTGAGTTTTCATCGGTCTTCACATG
CTGCTATATATTTCCACAGAGTTTCTTGATGTACTGAGCTTTTGTGTTTAGATGGAATAGCACAGGAGAAAAATC
TTTAAACTTAGTGCTTTGTCTATTCTTTATTTCTCTCAGGGTGGCCAGTATTTTGACTTATTTATCCTGCTTGAA
AGCTACTTGAGATGTGTACTGCTATTCTAAACACGTGATCTAGTTTCTTTCATCTCTGGCATAAGATTATATAAC
TTAATGTTAAGTGTCTTGAGGCATAAAGACAAAATGTGGCTTATTTTAGGATCTGTTTTTTCATCGAGGTCTCG
GGTATCCTTTCAAAGATAGTGAGAAGCAGACACTGCTCCTTGTGCAGCTCTGGTACCTCCTGCCCACTGCTGTCA
CTTCAAGCCACTGGCAATGCTTCTGTCTCGTGTCTTGGAGGAAAATCACCTGGGGGGAGGGGACTTCTTGTGGT
AAGAGCAAGTGCAAGTATGAAATGCGAAGATTGCCCCAGCTAAAAGTGGACAAGTCCGCTTTGTGAGATGAATAC
TTCCTGAGAACTTGACAAGTATCTCTCCATTTTACCATTATGAAAATCATTAATAAAAAACAGTTTAGATGC
CTTCTCCTTTTGGAGGAAAAAGGGTGCTTTTTTATTGTATAAAGCAGCGTCTTATGTATTTGATATACCATTGTT
TGAATTCCTGCTTTTAGCTGATAGATTCTCAAATATCCTTGATTTTGGATGTTTCAATATGTTTGTGAGAGAGGTT
TCTGGGAAGACTCTCTTTTTGCCCTCGGAAAAAGCAAAATATCAATGTTTGGGTGACTGTGTAAAGCTCAGTGT

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FIGURE 4090B

GTAAGAACATCTTTTGTCTAGGTTTTCTTCTGCTCTTTATTGAAGACAAACACTCACCAAAAAGAAAAATAAA
AGTTTTCAGAGAACTAATTTTCTTGGCAAGAGTATTACTTAATATTTTGGCCTCCTAAAGTTTCCCTAGTTAG
TACTCGGACTCCTGTGCTAATTGTCAGCTTACATATCATTGTATAGAGACTGTTTATTCTGTACCAAAGTATT
CAAAAGTACTACATTGAAAATAAACCGGTGACTGTTTTCTTCATAAAGTTCTGCGTTTGGCATCTTCACTCTT
CCAAAATGTATCTGTACATCAGAAATGTCAGTATTCCAAGTGTCTTTTAGTGTGGCTTTAGTATGGCTTCCTT
TAATATTGTACATACATTGTATCTTTGTTTTATGGTAATAAGTAATAAAAATGTAGACTTC

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FIGURE 4091

CTTTCCCGCTGAAGTCTAGATGTTGACATGTAATAAAGCGGGCAGCAGGATGGTGGTGGATGCGGCCAACTCCAA
TGGGCCCTTTCCAGCCCGTGGTCCTTCTCCATATTCGAGTTGAGGCTGTGAAGCTGGGCAGGGTTTCAGCTGAGCT
GAGGTTGGAAGTCCCTGACCTTCAGCTGTGGCCGCTTACGGAGCAGCAGGGAGAGCAAACCCATGGAGAACCCCG
CGGCCCCCAAAGCATGGACGGAGCTGCCAGCCTTCTCCCTGCCCTTCTTCCTCTACTCCCGACCTGCCAGCCTT
CTCCCCCTGCCCTTCTGCCTCTACTCCCGACCTGCCAACCTTAGCCTAAAAATCAGAGCTGCTAGAATCACACACAC
TGTCGTAGCTGGTTTTGTATTGTAAATGAGTCATTCTGTTATTTTGGAAACTTATGTCTCATGCCAGGATCTGCA
GATAGTTCTTTTTCAAATATTGTTTAGACAAAATAAATTTCTTTAAATATAATATCTCTACTTTAAATGCCTGG
GGTGTGTCATGCATTTTTCTAGGCTAGCAAAGCTTAAAGATTATTTCTATAATTTTCAGTTACATTTACCTTTATA
GATGGGTTACTCTAAGTAACAAATTAAACACACATGGATCTTCTAACTTTGGCTTTAAATCCTAAGAAGAGATAG
GTAATATATAAAAGAGTATTAAAAAGAAATGGAGAGTAAAGGTATATGTCGGGCAGATGCAGTAGAAAAGCAAGG
GTCATGACGTCAATGCTGGGCAAAGCTAAATTGTGAAGACAAAACAATAATGAAACAGGGTTATTCATCACGCTA
AAGCGTACAGTCCATAGGATGATATAACTACCATGAATTGGCCTAAATGATTGAACATTGAAACACATAAAGCG
AGAACTGTAGGGGATT

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FIGURE 4092

CAGTTGCTTCAGCGTCCCGGTGTGGCTGTGCCGTTGGTCCTGTGCGGTCACTTAGCCAAGATGCCTGAGGAAACQ
CAGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACGTTTCGCCCTTTCAGGCAGAAATTGCCCAGTTGATG
TCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCA
TTGGACAAAATCCGGTATGAAAGCTTGACAGATCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTT
ATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAAT
AACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATG
ATTGGCCAGTICGGTGTGGTTTTTATCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAAC
GATGATGAGCAGTACGCTTGGGAGTCCCTCAGCAGGGGGATCATTACAGTGAGGACAGACACAGGTGAACCTATG
GGTCGTGGAACAAAAGTTATCCTACACCTGAAAGAAAGACCAAACCTGAGTACTTGGAGGAACGAAGAATAAAGGAG
ATTGTGAAGAAACATTCTCAGTTTATTGGATATCCCATTAATCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTA
AGCGATGATGAGGCTGAAGAAAAGGAAGACAAAAGAAAGAAAAGAAAAGAAAGAGAGAAAGAGTCCGAAGACAAA
CCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAAGAAAAGAAAGGATGGTGACAAGAAGAAGAAGAAGATT
AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCAGCATATTACT
AATGAGGAGTACGGAGAATTCTATAAGAGCTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCA
GTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCACGACGTGCTCCTTTTGATCTGTTTGAAAACAGA
AAGAAAAAGAACAAACATCAAAATTGTATGTACGCAGAGTTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAA
TATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAA
AGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGTCAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGAT
AAAGAGAACTACAAGAAATTTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGAATACACGAAGACTCTCAAAAT
CGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACACATCTGCCTCTGGTGATGAGATGGTTTTCTCTCAAGGACTAC
TGCACCAGAATGAAGGAGAACCAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCA
GCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTC
CAACAGCTGAAGGAATTTGAGGGGAAGACTTTAGTGTCAGTCACCAAAGAAGGCCTGGAACCTCCAGAGGATGAA
GAAGAGAAAAAGAAGCAGGAAGAGAAAAAAACAAAGTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAG
AAAAAAGTTGAAAAGGTGGTTGTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTACAAGCACATATTGGC
TGGACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCA
AAGAAACACCTGGAGATAAACCCCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAAC
GACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGAT
CCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACCTTGGTCTGGGTATTGATGAAGATGACCCTACTGCT
GATGATACCAGTGCTGCTGTAACCTGAAGAAATGCCACCCCTTGAAGGAGATGACGACACATCACGCATGGAAGAA
GTAGACTAA

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FIGURE 4093

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYESLTDP SKLDSGKE
LHINLIPNKQDRILTIVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVTV
ITKHNDDEQYAWESSAGGSFTVRTDTGEP MGRGTKVILHLKEDQTEYLEERRIKEIVKKHSQFIGYPITL FVEKE
RDKEVSDDEAE EKEDKEEEEKEKEEKESEDKPEIEDVGSDEEEEEKDGD KKKKKKIKEKYIDQEELNKT KPIWTRN
PDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFVPRRAPFDLFENRKKKNNIKLYVRRVFIMDNCE
ELIPEYLNFI RGVVDS EDLPLNISREMLQQSKILKVIKKNLVKKCLELFTELAEDKENYKKFYEQFSKNIKLGIH
EDSQNRKKLSELLRYYTSASGDEMVS LKDYCTRMKENQKHIYYITGETKDQVANS AFVERLRKHGLEVIYMI EPI
DEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKKKQEEKTKFENLCKIMKDILEKKVEKV VVSNRLVTSPCCIV
TSTYGTANMERIMKAQALRDNSTMGYMAAKKHLEINPDHSIIETLRQKAEADKNDKSVKDLVILLYETALLSSG
FSLEDPQTHANRIYRMIKLGLGIDEDDPTADDTSAAVTEEMP PLEGDDDTSRMEEVD

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FIGURE 4094

GCGCGGTGGGCGTGATCCGGGCACTTAGGGCAGGATGAACGCTGCTTTCCAAGATGGCGACGGAGGGAGGAGGGA
AGGAGATGAACGAGATTAAGACCCAATTCACCACCCGGAAGGTCTGTACAAGCTGCTGCCGCACTCGGAGTACA
GCCGGCCCAACCGGGTGCCCTTCAACTCGCAGGGATCCAACCCTGTCCGCGTCTCCTTCGTAAACCTCAACGACC
AGTCTGGCAACGGCGACCGCCTCTGCTTCAATGTGGGCCGGGAGCTGTACTTCTATATCTACAAGGGGGTCCGCA
AGGCTGCTGACTTGAGTAAACCAATAGATAAAAGGATATACAAAGGAACACAGCCTACTTGTTCATGACTTCAACC
ACCTAACAGCCACAGCAGAAAGTGTCTCTCTCTAGTGGGCTTTTCCGCGAGGCCAAGTCCAGCTTATAGACCCAA
TCAAAAAAGAACTAGCAAACTTTTTAATGAGGAAAGACTAATAGACAAGTCACGAGTTACCTGTGTCAAATGGG
TTCCCGGTTTCGGAAAGCCTTTTCTAGTAGCCCACTCGAGTGGGAACATGTACTTATATAATGTGGAGCACACTT
GTGGCACCACAGCCCCCACTACCAGCTTCTGAAGCAGGGAGAGAGCTTTGCCGTGCACACTTGCAAGAGCAAAT
CCACGAGGAACCTCTCCTTAAGTGGACGGTGGGCGAGGGGGCCCTCAACGAGTTTGCTTTCTCCCAGATGGCA
AGTTCTTAGCGTGCGTGAGCCAGGACGGGTTTCTGCGGGTGTTCAACTTTGACTCAGTGGAGCTGCACGGTACGA
TGAAAAGCTACTTTGGGGGCTTGCTGTGTGTGTGTGTGGAGCCCGGATGGCAAGTACATCGTGACAGGTGGGGAGG
ACGACTTGGTGACAGTCTGGTCCTTTGTAGACTGCCGAGTAATAGCCAGAGGCCACGGGCACAAGTCTGGGTCA
GTGTTGTAGCGTTTGACCCTTATACCACTAGTGTAGAAGAAGGTGACCCTATGGAGTTTAGTGGCAGCGATGAGG
ACTTCCAAGACCTTCTTCATTTTGGCAGAGATCGAGCAAATAGTACACAGTCCAGGCTCTCCAAACGGAACCTCTA
CAGACAGCCGCCCGTAAGTGTACGTATCGGTTTGGTTCGGTGGGCCAGGACACACAGCTCTGTTTATGGGACC
TTACAGAAGATATCCTTTTCCCTCACCAACCCCTCTCAAGAGCAAGGACACACACAAATGTCATGAATGCCACGA
GTCCTCTGTGGAAGCAATGGGAACAGTGTTACAACACCCGGGAACCTCTGTGCCGCCCTCTCTGCCACGGTCCA
ACAGCCTTCCACATTTCAGCAGTCTCAAATGCTGGCAGCAAAGCAGTGTTCATGGACGGGGCCATTGCTTCTGGGG
TCAGCAAATTTGCAACACTTTCACTACATGACCGGAAGGAGAGGCACCACGAGAAAGATCACAAGCGAAATCATA
GCATGGGACACATTTCTAGCAAGAGCAGTGACAACTGAATCTAGTTACCAAACCAAACCGGACCCTGCTAAAA
CTCTGGGAACGCCCTGTGTCTCGAATGGAAGATGTTCCCTTGTTAGAGCCGCTGATATGTAAAAAGATAGCAC
ATGAGAGACTGACTGTACTAATATTTCTTGAAGACTGTATAGTCACTGCTTGTCAGGAGGGATTTATTTGCACAT
GGGGAAGGCCTGGTAAAGTGGGCTCATTGTCTATCCCAAGCCAGGCCAGTTCTCCAGGTGGAAGTGTAGTGTAGC
GACCTCACTGTCTGCGCGCACAGTCTCCCGGACTTGGAAGTTCGAGGGAGTGACGAGGAGGAGCTCCGAGCTGCGCC
TGAGCCGTGCCAGCCGGCGGACCTCAGGCGGTGGACGTCGGCGATAGCCGTGTGGACGGTGACCGGCTCACTCTG
CGGCGCCGTGCTCCCGCTGCTCACCCAAAGAAGTTGTTCCATTTTAAACCGGTCTTTGGGGCTGCAGTAAAA
ATAAGAAATGGAGTTTCTTGCTTTTACTCTAAAATTCATGTAATTAATTTTCATATATATATAATATATACA
TATATACATAGTGTAAATAAAATGTTTCTTGACAAAGAAATCCCTGAAATTCAGCTGTTATAGTGCTTCACTG
TTTTTGCACTGATTTTTCTATACCTTAGGTGGTCAGAAGACAACCTTGAATGCACCTCATAGAGAAAACGTGTACT
TTCTGACGTAATGTAATTCAGGAAGACAGACGCTGCAATCACAGATTTTAAAAAATTGTTTGCACTTAAAAATAG
TTGAATGCTGGTGGAAAGTTACTTTGCAGATGGGTGTAAGGACTCATGGCCCTCTGAGGTGCGGCGTGAAGATGC
CCTTTTTACCGTTGACGTTTATTTTACGTAAAAATAAACTGTTGTTTCCAATGCAATCAACTCTGTATTATATGT
ATAAATATTGTAATTCGCAATTGGGGAAAATAGTTACTTCACTAGTAATTTTCATCATTTAAGAGTGATATTTCT
TAATTCACAAAAGTTAATATTTAAACTATCTTGAATAT

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FIGURE 4095

CGCATGCGCAGGCGACAGCTCATGGCGTTTCAGGGCCTGACGGTTGCTAGGGTGACAGGGACACAACATGGCGGCG
GGATCTCTAACGCTCTCCTTCGAGGGACCACCACGGAGATCCTAGTGCGGGACCCCGCTCAGGGAAGTGGAAG
CAGGGGGACAACCTTCCTGCTTCCTTTCTTTCCGTCCAGTGTCGGCAAGGGGTTGTCACCGGCTTCCGCATCCAA
GATGAAGAACTATAAAGCAATTGGCAAATAGGAGAGGGGAACGTTTTCTGAAGTTATGAAGATGCAAAAGCCTGAG
AGATGGAAGTACTATGCATGTAAACAAATGAAGCAGCGCTTTGAAAGTATTGAGCAAGTCAACAACCTACGAGA
GATCCAAGCACTGAGGCGCCTGAATCCGCACCCAAACATTCTTATGTTGCATGAAGTGGTTTTTGGACAGAAAATC
TGGTTCTCTTGCACTAATATGTGAACCTTATGGACATGAATATTTATGAGCTAATACGAGGGAGAAAGATACCCATT
ATCAGAAAAAAATTATGCACTATATGTACCAGTTATGTAAGTCCCTGGATCATATTCACAGAAATGGAATATT
TCACAGAGATGTAAACCAGAAAATATACTAATAAAGCAGGATGTCCTGAAATTAGGGGACTTTGGCTCCTGCCG
GAGTGTCTATTCCAAGCAGCCGTACACGGAATACATCTCCACCCGCTGGTACCGGGCCCCGGAGTGTCTCTCAC
TGATGGGTTCTACACGTACAAGATGGACCTGTGGAGCGCCGGCTGTGTGTTCTACGAGATCGCCAGTCTGCAGCC
CCTCTTTCTGGAGTAAATGAACTGGACCAAATCTCAAAAATCCACGATGTCATCGGCACACCCGCTCAGAAAGAT
CCTCACCAGTTCAAACAGTCGAGAGCTATGAATTTTGATTTTCTTTTAAAAAGGGATCAGGAATACCTCTACT
AACAACCAATTTGTCCCCACAATGCCTCTCCCTCCTGCACGCAATGGTGGCCTATGATCCCGATGAGAGAATCGC
CGCCACCAGGCCCTGCAGCACCCCTACTTCCAAGAACAGAGGAAAAACAGAGAAGCGGGCTCTGGGCAGCCACAG
AAAAGCTGGCTTTCCGGAGCACCCCTGTGGCACCAGGAACCACTCAGTAACAGCTGCCAGATTTCCAAGGAGGGCAG
AAAGCAGAAACAGTCCCTAAAGCAAGAGGAGGACCGTCCCAAGAGACGAGGACCGGCTATGTCATGGAAGTACC
CAAATAAAGCTTTCCGGAGTGGTCAGACTGTCGTCTTACTCCAGCCCCACGCTGCAGTCCGTGCTTGGATCTGG
AACAAATGGAAGAGTGCCGGTGCTGAGACCCTTGAAGTGCATCCCTGCGAGCAAGAAGACAGATCCGCAGAAGGA
CCTTAAGCCTGCCCCGAGCAGTGTGCGCTGCCACCATAGTGCGGAAAGGCGGAAGATAAAGTAGCAGCACCGT
CGTCTCGACTTCGGAGGCAACACCAAGCCCGACCGGGCCAGGCCTGGGTGATCTGCTGCTGAGACGCCACGGAGG
GCTGGGGATGCGCCTGCGTCCGTTTCGCGCTGGCCGGGGCTCTGGGTGCTGCCCTGCGCCCTGCCGCACCCGCGG
CCGCGCAGCTGCC TAGGATGTTCTGGGCTAATATACTTGTAACCACCGCATTCTAGGGTTTTCTTTTCAATTTT
CGTTAAGAATTTGGGGCAGGAAATACTTTGTAACCTTTGTATATGAATCAAAACAAACGAGCAGGCATTTCTGTGA
TGTGTTGGGCGTGGTTGGAAGGTGGTTCTGCGTGTCCCTTCCCAGCGCTGCTGGTCAGTCGTGGAGCGCCATCA
TGTCTTACCAGTGACGCTGCTGACACCCCTGACTTTTATTAAAGAATAAGCTGTCGTTAAAAAAAAAAAAAAAAAA
AAAA

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FIGURE 4096

MKNYKAIGKIGEGTFSEVMKMQLRDGNYYACKQMKQRFESIEQVNNLREIQALRRNLNPHPNILMLHEVVFDKRS
GSLALICELMDMNIYELIRGRRYPLSEKKIMHYMYQLCKSLDHIHRNGIFHRDVKPENILIKQDVLKLGDFGSCR
SVYSKQPYTEYISTRWYRAPECLLTGFFYTYKMDLWSAGCVFYEIASLQPLFPGVNELDQISKIHDVIGTPAQKI
LTKFKQSRAMNFDFFPKKSGIPLLTNLSPQCLSLHAMVAYDPDERIAAHQALQHPYFQEQRKTEKRALGSHR
KAGFPEHPVAPEPLNSCQISKEGRKQKQSLKQEEDRPKRRGPAYVMELPKLKLSGVRLSSYSSPTLQSVLGSG
TNGRVPVLRPLKCIPASKKTDPOKDLKPAPQQCRLPTIVRKGGR

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FIGURE 4097A

CCCCCGGCGGAGCCAGCTGCTGCTCTTCGGTGCTGGCCCCGGTGCCGGCCCCGTTGCCAGGGAACAGGCTCCCC
GCAGCCCCCGCGGCCCGGAGTCCATCCCGCCTCCTCCGGCCCCGGCGGGCCGACGAGTCCGGAGGGGCTGCCGCG
GGAGCCCCCAGGTTTCCCTAGATGACAAATAAACATTCTTTTCTGCGTGAAAGATAGTCTGTGGAAACCTTGGC
CATGGCATCGATATCAGAGCCTGTTACATTACAGAGAGTTCTGCCGTTGTACTATCTCTCAATGCCATTCCGAC
AAAGATCCAGAAGGGTTTCCGCTCTATCGTGGTCTATCTCACGGCCCTCGACACCAACGGGGACTACATCGCGGT
GGGCAGCAGCATCGGCATGCTCTATCTGTACTGCCGGCACCTCAACCAGATGAGGAAGTACAACCTTTGAGGGGAA
GACGGAATCTATCACTGTGGTGAAGCTGCTGAGCTGCTTTGATGACCTGGTGGCAGCAGGCACAGCCTCTGGCAG
GGTTGCAGTTTTTCAACTTGTATCTTCATTGCCAGGGAGAAATAAACAGCTTCGAGATTGTATGTCACTGGTAT
TCACAAAAATAGCATTACAGCTCTGGCTTGGAGCCCCAATGGAATGAAATTGTCTCTGGAGATGACAAAGGCAA
AATTGTTTTATTCTTCTCTGGATCTAGACCAGGGGCTCTGTAACCTCCAGCTGGTGTGGAGGAGCCATCTTCCAT
TGTGCAGCTGGATTATAGCCAGAAAGTGCTGCTGGTCTCTACTCTGCAAAGAAGTCTGCTCTTTTACACTGAAGA
AAAGTCTGTAAGGCAAATTGGAACACAACCAAGGAAAAGTACTGGGAAATTTGGTGCTTGTTTTATACCAGGACT
CTGTAAGCAAAGTGATCTAACCTTGTATGCGTCACGGCCCCGGGCTCCGGCTATGGAAGGCTGATGTCCACGGGAC
TGTTCAAGCCACGTTTTATCTTAAAAGATGCTTTTGCCGGGGGAGTCAAGCCTTTTGAACCTGCACCCCGCTCTGGA
ATCCCCCAACAGTGGAAGTTGCAGCTTACCTGAGAGGCACCTGGGGCTTGTTCATGTTTTCTTTCAAGAAGGCTG
GGTGCTGAGTTGGAATGAATATAGTATCTATCTCTAGACACAGTCAACCAGGCCACAGTTGCTGGTTTTGGAAGG
ATCCGGTGATATTGTGTCTGTTTCGTGCACAGAAAATGAAATATTTTTCTTGAAAGGAGATAGGAACATTATAAG
AATTTCAAGCAGGCCTGAAGGATTAACATCAACAGTGAGAGATGGTCTGGAGATGTCTGGATGCTCAGAGCGTGT
CCAGTGTCAGCAAGCGGAGAAGCTGCCAGGGGCCACAGTTTCTGAGACGAGGCTCAGAGGCTCTTCCATGGCCAG
CTCCGTGGCCAGCGAGCCAAGGAGCAGGAGCAGCTCGCTCAACTCCACCGACAGCGGCTCCGGGCTCCTGCCCC
TGGGCTCCAGGCCACCCCTGAGCTGGGCAAGGGCAGCCAGCCCCTGTACAGAGATTCAACGCCATCAGCTCAGA
GGACTTTGACCAGGAGCTTGTCTGAAGCCTATCAAAGTGAAAAGGAAGAAGAAGAAGACAGAAGGTGG
AAGCAGGAGCACCTGTACAGCTCCCTGGAATCGACACCCTGTCCGAATTTCTGGGGACAGTCCCCAGTCTT
GAACACAGACTTGCTGTGATGACCTCAAGTGCTCTGGGCGTAGCGTGATCAGTTAAGTGCAGAGTCTCCAGA
CCAGGAAAGCAGCTTCAATGGTGAAGTGAACGGTGTCCACAGGAAAATACTGACCCCGAAACGTTTAAATGTCCT
GGAGGTGTCAAGATCAATGCCGTGATTCTCTGGCTGAGGAAGATGACATTAGAAGTGAAATGCCACACTGTACCA
TGCACATGGGCGGGAGCTGCTCAATGGAGCGAGGGAAGATGTGGGAGGCAGTGATGTACGGGACTCGGAGATGA
GCCGTGTCTGCAGATGATGGACCAATAGCACACAGTTACCCTTCCAAGAACAGGACAGCTCTCCTGGGGCGCA
TGATGGGGAAGACATCAACCCATTGGCCCCCAAAGCACTTTTGTGAAGTCCCCCTCCTGAACCTCACTCACTGT
GCCTTCCAGCCTCAGCTGGGCCCCAAGTGCTGAACAGTGGCTGCCTGGGACCAGAGCTGATGAAGGCAGCCCCGT
GGAGCCCAGCCAAGAGCAGGACATCCTAACAGCATGGAGGCCCTGTGGCCACCTCAGCACAAATCTCTGGCATGC
TGTCACTGATGATGACACAGGTGAGAAAGAAATACCCATTTCTGAACGTGTCTTGGGGAGTGTGGGAGGACAGCT
GACTCCGGTCTCTGCCTTGGCAGCCAGCAGCTACAAGCCCTGGCTTGAGCAGCCTCCACGGGATCAGACATTGAC
GTCCAGCGATGAGGAGGACATCTATGCCACGGGCTTCTTCTTCTCATCTCAGAGACAGTGTGACAGAGCTCGG
ACCTAGTTGCTCCAGCAGGACCTGAGCCGGCTGGGTGCAGAGGACGCCGGGCTGCTCAAGCCAGATCAGTTTGC
AGAAAGCTGGATGGGCTACTCGGGTCCCGGCTATGGCATCTCAGCTTGGTGGTCTCCGAGAAGTATATCTGGTG
CCTGGACTACAAAGGCGGCCTGTTCTGCAGCGCGTTGCCGGGCGCCGGGCTGCGCTGGCAGAAGTTTGAAGATGC
TGTCCAGCAGGTGGCAGTCTCGCCCTCAGGAGCCCTTCTCTGGAAGATTGAACAGAAATCTAACCGGGCTTTTGC
TTGTGGGAAAGTCACCATCAAGGGGAAGCGGCAGTGGTACGAAGCCCTGCCCCAGGCAGTGTGTTGTGGCCCTGAG
CGATGACACGGCCTGGATCATCAGGACAGTGGGGACCTATACTTGCAGACAGGTCTGAGCGTGGATCGCCCTTG
TGCCAGAGCCGTAAAGGTGGACTGTCCCTACCGCTGTCCAGATCAGAGCCCGGAACAAATGTGGTGTGGGCGCT
GACAGAGCAGAGGGCCCTCCTGTACCGGGAGGGCGTGAGCAGCTTCTGTCCGGAAGGCGAGCAGTGGAAAGTGTGA
CATTGTACGCGAAAGGCAAGCTTTAGAACCGCTCTGCATAACGCTCGGGGATCAGCAGACTCTCTGGGCCCTGGA
CATCCATGGGAACCTGTGGTTTCAAGTGGCATTATTTCCAAGAAGCCCCAAGGAGATGACGACCATTGGTGGCA
AGTGAGCATCACGGACTATGTGGTGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
GGCCACAGCAGCCCAAGCCCCGTAGAAAAGGTGGCAGATAAGCTGCGCATGGCGTTTTTGGTCCAGCAGCTTCA
GTGCCAGCCAAGCCTTCTCGGGGTCAATAACAGCGGTGTCTGGATCTCCTCGGGCAAGAATGAATTCCACGTGCG
TAAGGGAAGTCTCATAGGCACCTACTGGAATCATGTGGTTCCCCGTGGGACAGCTTCTGCTACAAAATGGGCCTT

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FIGURE 4097B

TGTGTTGGCTTCTGCAGCTCCACGAAGGAAGXXXXXXXXXXTGGCTGTGCCAGAGCAGCAAGGACCTGTGCAG
CGTCAGCGCCCAGAGCGCACAGTTCGCGGCCCTCCACGGTGCAGCTGCCTCCCGAAGCCGAGATGCGCGCCTATGC
CGCTGCCAGGATGCGCTGTGGGCGCTGGACAGCCTCGGCCAGGTGTTTCATCAGGACGCTCTCCAAGAGCTGCCC
CACGGGCATGCACTGGACCAGGCTGGACCTCTCCAGCTAGGAGCTGTAAAATTGACAAGCTTGGCATGTGGAAA
TCAGCACATCTGGGCCTGTGATTCCAGGGGTGGAGTTTACTTCCGTGTAGGGACTCAGCCTCTCAATCCAGTCT
CATGCTTCCAGCCTGGATAATGATTGAGCCACCTGTCCAGCCCCGCCGGGGTTCAGCTTGGTCAGCGTCCATTCCAG
CCCCAACGACCAGATGCTGTGGGTGCTTGACAGCAGGTGGAACGTGCACGTGCGGACCGGGATCACCGAGGAGAT
GCCTGTGGGGACCGCTGGGAGCATGTGCCAGGGTTGCAGGCCTGCCAGCTGGCGCTGAGCACCAGGACCGTGTG
GGCCCCGTGTCCAAACGGAGACCTCGCCCCGGCGGTACGGCGTACAGACAAGAACCCCGCCGGGGACTACTGGAA
GAAAAATCCCGGCAGCGTGTGCTGTTTTCAGAGTGAAGTGCCTGAGCTGTGGGCTGTGGGCCCCGCCGGCTA
CCTCCTCCAACGGCTGACAAAGACGTTTCAGCCACTCGCACGGCACCCAGAAGAGCAGCCAGGCCGCCATGCCCA
CCCTGAGGACCTGGAGGACGAGTGGGAGGTTCATCTGAAGGAGCCCTGGCCGAGTCACGCGGAGGGGCCGGCGTC
TGTGGCGGGCACAGGGGCTTCAGAGTGAAGTCCCTGGTGGACGCGCTGCCTCAACACTTGTCCAGACACCTCTGGC
CAGGTTGGACCCGCACACTTACTTTTCATCTATGTTGGTTTCTGTCTCGTTCCAGAACCCACAGCCTCCACCCGTG
GCTGGCGTGATTGCTGCAGCAGTGGCGCCTCCTAGCTCAGGACAGTGGCGACTGCCCGGCTGCATGCACTCCGAT
TACCCACGTGCTGCCGTCTGGTCTCATCCACAGATAGCTCCAGCTTTTGTGGTGGGAGTGGTCTCCGGAGGCC
TCCAGAACCAAGGGTAGCCGGGCAGCTGGTTTGGCCAGGGCCTCCTTCCACATTAGTAGCCCCAGGGCCAGAT
GGAGCCAAAGGTGAGCTCTCTGCAGCGCGGGATGTGCTCGGTGATGGCTTTGTCCCATCATAGGGGGGTGTCCCC
CCAGAGACAAAGCTGCAGAGCACATTCCATGCCAGACGCTCTGGCCAGGAAGCTGAGGCGGGCTTGAGAGGAGA
GCGCTGGCCATGCCAGGAGAGAACCCACGCACATGCACACCACAACACACACCTCACCTCACACCACAGC
ACACCTCACACACACACCGCACTGCACCATACCTCACCACATCTCACCACACCACAGCACACCTCACCACACA
ACACACCACACCCACACCGCACTGCACCGCACCGCACCGCACCGTACCTCGCCACATCTCACCACACCACCCA
CACCACACCTCACTGCCACACACGGCGCAGGCTGCCCGCCTCCTGGAGAGCACACTTCAGCTGAAACAGTAAAG
CCTGATGGGTGCAAATGGAACCTGGATGTGTGCACGTGTGTCCAGGTAGGGACGGCACAGGAGGGTGCATGGGG
CGTGGGGGAGCTGAGCAAGGGTCGCTCACTTAGAAATGTCTTTGGAATGGTGTTTAACTAATGCTGCTGGCGGAC
ATCCTAAACCAGATGCATCCTCAGAGGACGAGTCTACTAATTATTGCCTTTGTTGTTGTATTACAAATCTGCAT
AAAAATACCTCATTTCAAATCAAATCTTACAAATTTAGAAGAGAGATATGTTTTCCGAAAACAGTGGAAGCCCTTT
GTTCTTTCCCGGGTTTGTCTGAGCCTGCACTGTCTCGCCTGCAGCCTCAGAGGGGCAGGCATCCCCGCACAGA
CTTGACTGGCAGGGCGGTACGGGACCTGCGGGCTGGCTCCGAGTGGCAGCCCATGCCTTCTGCGGGGTATGGGT
TGACACTTGACAGGTTGAAACCAAGTGCCTCTATGGACGGCTGCTGTGGCCCTTCAGACAATGGGCAGTGCCAC
CCGCCCCACTGGCATCTGCGTGTGAGGGCTAGGCCGCCCTGCCACACATCCCGCCCCCTCCCGGAGGCAGCTTCA
GGACAGGACACCAGGCTGGCTGCTTTTTTTAGCCTGCCCTGGCCAGGCCAGTCTTGGTGTGAGGGAGCCCC
CAGGCCGCAGGTGGAGGGTGATAAAATATGTTCTCTGACAGGACCCAGCCAGCCACATAGGTGGAGGTTTTCCAT
GTCCAAATGAGGTCAAGATGCCGAAATCCCAGATCTGACTTCACACTTCCCTTTTCTAGAACCTTTTGTAAGT
TGGTGGCAGCAGAGGCAGCCCCAGGCCGGGTGCATCTCTGTGTCTGTGTGCTTGGCCGCGCCTCACGGA
TGGCAAAGCTCTCTCACCCATGGGACTGTAGTGCAATTAACCCGCGTCTAGGTGATGCTTTTAAAGTTGTAGC
TTCGTGCTTTGTACAGTTTTCTTTCTGGTTTTAATTTTAGTTGTGCTTTGAGTCAGTGCAATAAACTAGACTTT
TTCC

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FIGURE 4098A

AGCTTGAGCGCGGCGGCGGCGTTGTTTCAGTCAGAGCGAGAACATTCCAGAGGTCGCCCAGCTCCGGCGCTGACGG
GTGTGGACCGCGGACGTCGCTGGGACAGCCCTCCCCGCTGCTCGGCGCGGCATCTGGCCCGGCGCTCCTCGC
TGCCTTCGCTCCGCTCCTCGGACTCGGACTCGGGTTTATATCGCGCTCACTTCATCCAGTCCCGGGCGAG
CAGCGTTGGGTTTATGTCTTTATTTGACGAAAACGAGCTGTTGCGCAGCCATTGGTACCTGTATTGGGGAAACAT
AGCATACAAGCAAGAAGCTTACAGCCTCAGTGGCGAAAATTTTTTCATGTCAAGAGACCGAGAACCTTTGCAGTCG
TTTATGTCATCCCTTCTTCTCCAGACAGAAGATACCAAAAAGTTGCAATCAAAGATCTCTTCATCTTATTGATAA
AGCCACTAATAAGCCAAAATGCTGTCAATGTCAACCGCAGCGTGTCAAGACAGTTCTATCGCTACAAGATGCCC
CGTCTGATTGCCAAGGTTGAGGGCAAAGGCAATGGAATCAAGACAGTTATAGTCAACATGGTTGACGTTGCAAAG
GCGCTTAATCGGCCTCCAACGTATCCACCAAATATTTTGGTTGTGAGCTGGGAGCACAGACCCAGTTTGTATGTT
AAGAATGACCGTTACATTGTCAATGGATCTCATGAGGCGAATAAGCTGCAAGACATGTTGGATGGATTCAATAAA
AAATTTGTTCTCTGTCTGAATGTGAGAATCCTGAAACAGATTGTCATGTCAATCCAAAGAAGCAAACAATAGGT
AATTCCTGTAAAGCCTGTGGCTATCGAGGCATGCTTGACACACATCATAACTCTGCACATTCACTCTCAAAAAC
CCACCTGAGAATAGTGACAGTGGTACAGGAAAGAAAGAAAAAGAAAAAGAAAAAGGGAAGACAAGGAA
AATGGCTCCGTATCCAGCAGTGAGACACCACCACCACCACCACCACCACCACCACCACCACCACCACCACCACCACC
ATGGAAGAAGAGGAGGATGATGACTGGGGAGAAGATCAACTGAGGAAGCTCAAAGGCGTGAATGGATGAAATC
AGTGACCATGCAAAAGTTCTGACACTCAGTGATGATTGGAAGAACAATTGAGGAGAGGGTCAATATCCTCTTT
GATTTGTTAAGAAAAAGAAAGAGGGGTGTTATTGATTCACTGACAAAGAAATCGTTGCTGAAGCAGAAAGA
CTGGATGTAAAGCCATGGGCCCTCTGTTCTAACTGAAGTTCTTTTTAATGAGAAGATTAGAGAACAGATTAAG
AAATACAGGCGCCATTTCTACGATTTTGTCAACAACAAAAAGCCCAACGGTACCTTCTTCATGGTTTGGAG
TGTGTGGTAGCAATGCATCAAGCTCAGCTTATCTCCAAGATTCCACATATCTTGAAGGAGATGTACGATGCAGAC
CTTTTAGAAGAAGAGGTATCATCAGCTGGTCGGAAAAGGCCTCTAAGAAATATGTCTCCAAAGAACTTGCCAAA
GAGATTGCTGTCAAAGCAGAACCATTTATAAAATGGTTGAAGGAGGCAGAGGAAGAATCTTCTGGTGGCGAAGAA
GAAGATGAAGATGAGAACATTGAGGTGGTGTATTGCAAGGCTGCCAGTGACCGAAAGTTGAGACTGTAAAGTCA
GACAACAAGGATGACGACATCGATATTGATGCCATTGAAAGGGATGGATGCAACCTAGCTTAACAGTATAATGCT
GCAAAATTTCTCCATTATCAGCCAGAAGTGCAACATGTATGTGCAAAAGCTAAAATGGCTTAACATCATGCTAC
ACTTTACACTAAAAATCTATTACTGTGAGTGGTCTGTTATTAAGCCCAATGAGACATCTAGGGAGTCCATACACA
TCAGTGAGCAGATGTAGTTTGCTTATTTATAGCATGTTCTTTTTGAAAACTAGTGGTGGACACATTTGGATCA
CATTTATACAGTTATAAAAAATAAGGTTTGATTTTGGTCGTTCTTCAGATGTTTGGCTCTGAATGACTTAAGCTG
AAGTAACGCTCCTTACTTTAAATGTTCTGCCATCATTTACCTGATGAGCATTCTTGGAGCCTGCCAGATATT
GTTAGGTCCTGGGCTGCAAGAGGTCCTCAACAGGATGTAAAGCAAACCTTAATTGTAATTAATTTATTAGCCC
ATTAAGAAAGTACTAAAGTTTATCTCTGTAGTTCTCAAATTGGCATCTGGTAATGTACATTGTGAGGTAGACT
GATAATGAAATGACAGTGCAACATCTTAACCAAGAAGTAAATATGACCTCAGTGTCCTATAAATAATGTAAGAGC
AGGATTTGAAACTTGAGAGCTGTTTCTCATTTATGTACACTTGCCCCAAATTGTCTTTGAAGTCGTGTGCAT
TGCAGTTGGATGAGCCAGGGAATTAATACATTAACAAGCATTTTGTGTGTGCGTAGTAGTTACTTTGTACTGA
GAGAATTTGCTTTGGGGTGCAATTAACAATAAACTGATTTTATTTGGGAGAAACAAGGAAGGGTGCACCTTAAC
AGCAACCTAAGCATGATTTTTCAGCTTTTGCCCTTAGGGTTAAATTACAATTCCAAATGTTAGACATATCTGTA
TTTTTTCGTTTCAAGTGTGGCTTTAATTTTCCCTCTTGCAAGTTTGTCTGTAATGCCTTTTACATTTGGACACATA
GTTTATGCTTTTATAGATTTTGGTTGCTTTCTTGCCAAATAAGTGTTAACTGTGTTTCAAACCTGATTTTCTTTT
TTTTTCTTTTTTTTTTCTTCCAGAATGTCTTATTTAAAAAGAAAGCTAAAGCATACTTCTAAGTCAGAGCCTCT
ATTTTGGTGTAAGACTTGGGATATTTTTTACTTTCATTTGAATATAGCCAGGCACCCAAGAAGTCTGATGGCCAC
CTGAGTGAGGTGACAAGGACCTGACAGAGCCCATGCAGGGCTTTAGATTTGGACACACAAGAGTTGATAACTTC
CTCATGAACCTCTTGCTGATCTAACTCATATTATGGGTTCTGACTGTTTGAAGTAATCGTCTTCAAGGTTAAAC
CTCTTGGCAGTTACCTTTTTTCAAAAGTGACAGTGGGAATCGAGAATCGATAGGGTTAATTTTGGAGCAGTGGC
TTATACCATTACCTCTGTTTTTTTTGTGATTATTTACAGATAATGAGACCTTAATAACAAATAGGCGTAAAAAA
ATTTTTCATATTGAAATGATAGAAACATTTGATGTAATAAACTTGGTTGGCTTGATATTTTAAAGGAATTGAAACC
TAGCAATCTTATTGGAGAGACAAGAATTGGTCTCCAGCTGCCTTTGATCAAGATTCGGGTGCAAGTGGAGCAGGA
GCCATATACCTGGAGGGAATGTGCTTTGTACACCAAAGAGGATTTTTTTTTTCTTCAAACCTTGATGTTGCCATA
GGTTTCAAATTTCTTTGCCGCAAGGCTGATCTGCTTTTCACTAAGTGAATTTCTGTAGGAGATACTGGTGACCTAAG

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FIGURE 4098B

CTAAGTTGCACTCAGCATACTCAGTGTCAAGCTAATGAGGTTCTATTATAAAGGTTCTACTTTTAATCTGAGGGA
AAACATGTTTCAGGGCTTCTAGAACACTAAAAAATTTGGCTTAAACCAGTGTTCACTCTGGTGCCAAACTTCGAAT
GGAATACAAATTCACATAATCTGAACTTTGTTCACAGGTTATCCTAATAGAGTAATTCTTCACTTTGCTCTATTG
AACTGTCTTAAGGATTTGTTTAAACAGCTAAGTTACTTGATTAAAATAATGATAAAATTGTAAAAAAAAAAAAAA

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FIGURE 4099

MSVNVNRSVSDQFYRYKMPRLIAKVEGKGNGIKTVIVNMVDVAKALNRPPPTYPTKYFGCELGAQTQFDVKNDRYI
VNGSHEANKLQDMLDGFIKKFVLCPECENPETDLHVNPKKQTIGNSCKACGYRGMLDTHHKLCTFILKNPPENS
SGTGKKEKEKKNRKGKDKENGSVSSSETPPPPPPNEINPPPHTEEEEEDDWGEDTTEEAQRRRMDEISDHAKV
LTLSDDLERTIEERNILFDFVKKKKEEGVIDSSDKEIVAEAEERLDVKAMGPLVLTEVLFNEKIREQIKKYRRHF
LRFCHNNKKAQRYLLHGLECVMHQAQLISKIPHILKEMYDADLLEEEVIISWSEKASKKYVSKELAKEIRVKA
EPFIKWLKEAEEESSGEEEEDEDENIEVVYSKAASVPKVETVKS DNKDDIDIDAI

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FIGURE 4100

GCCCCGCCGCCCATGCCCTTCTCCAACAGCCACAACGCACTGAAGCTGCGCTTCCCGGCCGAGGACGAGTTCCC
CGACCTGAGCGCCCACAACAACCACATGGCCAAGGTGCTGACCCCCGAGCTGTACGCGGAGCTGCGCGCCAAGAG
CACGCCGAGCGGCTTCACGCTGGACGACGTCATCCAGACAGGCGTGGACAACCCGGGCCACCCGTACATCATGAC
CGTGGGCTGCGTGGCGGGCGACGAGGAGTCTTACGAAGTGTTCAGGATCTCTTCGACCCCATCATCGAGGACCG
GCACGGCGGCTACAAGCCAGCGATGAGCACAAGACCGACCTCAACCCCGACAACCTGCAGGGCGGGCGACGACCT
GGACCCCAACTACGTGCTGAGCTCGCGGGTGCACGGGCCGAGCATCCGTGGCTTCTGCCTCCCCCGCACTG
CAGCCGCGGGGAGCGCCGCGCCATCGAGAAGCTCGCGGTGGAAGCCCTGTCCAGCCTGGACGGCGACCTGGCGGG
CCGATACTACGCGCTCAAGAGCATGACGGAGGCGGAGCAGCAGCAGCTCATCGACGACCACTTCTCTTCGACAA
GCCCCGTGTCGCCCCCTGCTGCTGGCCTCGGGCATGGCCCGGACTGGCCCCGACGCCCCGCGGTATCTGGCACAATGA
CAATAAGACCTTCTGGTGTGGGTCAACGAGGAGGACCACCTGCGGGTCACTCTCCATGCAGAAGGGGGGCAACAT
GAAGGAGGTGTTCACCCGCTTCTGCACCGGCCCTCACCAGATTGAAACTCTCTTCAAGTCTAAGGACTATGAGTT
CATGTGGAACCTCACCTGGGCTACATCCTCACCTGCCCATCCAACCTGGGCAACGGGCTGCGGGCAGGTGTGCA
TATCAAGCTGCCCCAACCTGGGCAAGCATGAGAAGTTCTCGGAGGTGCTTAAGCGGCTGCGACTTCAGAAGCGAGG
CACAGGCGGTGTGGACACGGCTGCGGTGGGCGGGGTCTTCGACGTCTCCAACGCTGACCGCCTGGGCTTCTCAGA
GGTGGAGCTGGTGCAGATGGTGGTGGACGGAGTGAAGCTGCTCATCGAGATGGAGCAGCGGCTGGAGCAGGGCCA
GGCCATCGACGACCTCATGCCTGCCAGAAATGAAGCCCGGCCCCACACCCGACACCAGCCCTGCTGCTTCTTAAC
TTATTGCCTGGGCGAGTGCCCAACCATGCACCCCTGATGTTGCGCGTCTGGCGAGCCCTTAGCCTTGCTGTAGAGAC
TTCCGTACCCCTTGGTAGAGTTTATTTTTTTGATGGCTAAGATACTGCTGATGCTGAAATAAACTAGGGTTTTGG
CCTGC

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FIGURE 4101

AGGACGGCGGGAAGAGGAGTGC GGAACCCGCGGGAGGATGTGCACAGAGGGCCCAGGAGGAGCCTCAGGAGCCGG
ACTGCCGTTGGCCAACCGAGTCCCCAGGGAGACACTTAAGGGAAATTAACTGCAGAGTGCAAGAGATGCCCTCAG
TCAAGTCAGCCAAAAACACGCGGGTCATCCCCAAGCCCCAGAGAGTGACAGAGCCCCGATGACACGGACACCTCG
GCTGCTGTCACTTCCCTGGTTTCGGGCCTCCACAGGCTTTGAATTGAAGGCGAGTGCCCTCAGAATTTGCATCCAT
TGTTCTGTCTTTCTGGGAAGTTATTTCATCCTGGTGGCCAGGCCACCGACAAAATGGATTGGATCTACTGGACC
TGAATCCCAGAATTATTGCTGCAATTAAGAAAGCCAACTGAAATCGGTAAAGGAGGTTTTACACTTTTCTGGAC
CAGACTTGAAGAGACTGACCAACCTCTCCAGCCCCGAGGTCTGGCACTTGCTGAGAACGGCCTCCTTACACTTGC
GGGGAAGCAGCATCCTTACAGCACTGCAGCTGCACCAGCAGAAGGAGCGGTTCCCCACGCAGCACCAGCGCCTGA
GCCTGGGCTGCCCGGTGCTGGACGCGCTGCTCCGCGGTGGCCTGCCCTGGACGGCATCACTGAGCTGGCCGGAC
GCAGCTCGGCAGGGAAGACCCAGCTGGCGCTGCAGCTCTGCCTGGCTGTGCAGTTCCCGCGGCAGCACGGAGGCC
TGGAGGCTGGAGCCGTCTACATCTGCACGGAAGACGCCCTTCCCGCACAAAGCGCCTGCAGCAGCTCATGGCCAGC
AGCCGCGGCTGCGCACTGACGTTCCAGGAGAGCTGCTTCAGAAGCTCCGATTGGCAGCCAGATCTTCATCGAGC
ACGTGGCCGATGTGGACACCTTGTGGAGTGTGTGAATAAGAAAGGTCCCCGTA CTGCTGTCTCGGGGCATGGCTC
GCCTGGTGGTCATCGACTCGGTGGCAGCCCCATTCCGCTGTGAATTTGACAGCCAGGCCTCCGCCCCCAGGGCCA
GGCATCTGCAGTCCCTGGGGGCCACGCTGCGTGAGCTGAGCAGTGCCCTCCAGAGCCCTGTGCTGTGCATCAACC
AGGTGACAGAGGCCATGGAGGAGCAGGGCGCAGCACAGGGCCGCTGGGGTTCTGGGACGAACGTGTTTCCCCAG
CCCTTGGCATAACCTGGGCTAACCAGCTCCTGGTGAGACTGCTGGCTGACCGGCTCCGCGAGGAAGAGGCTGCCC
TCGGCTGCCAGCCCGGACCCTGCGGGTGCTCTCTGCCCCCACCTGCCCCCTCCTCCTGTTCTTACACGATCA
GTGCCGAAGGGGTGCGAGGGACACCTGGGACCCAGTCCCACTGACACGGTGGCGGCTGCACAACAGCCCTGCCTG
AGAAGCCCCGACACAGGGGCTCGGGCCTTTAAACGCGTCTGCCTGGGCCGTGGCACAGCTGGGAGCCTGGTTC
AGACACAGCTCTTCCAGGGCAGCGCTCCACTTTCTCATCCGAAGATGGTGGCCACAGACTGACCCCCATCTGAG
CTGGGGGATGTTCTGCCTCTCCCTGGGTCTGGGGACAGGCCCGCTTGTCTGGGTACCTGGTCCCCACTGCTGAGC
TGGCCCTTGGGGAGAGGTGATTCTCAGGGCTGGAGCCTGGGGTGCTCTACAGTGACTCCCTGGGAGCCGCTGCT
TCTTCTCTCCATATGGAAGCCCAACTGGGGTTGCGTCTGAGGCCTGCCCCCTGGGCTGGGGCCTCAGACCCCTC
AGCCTTGGGACCGTGCCACGAGGGTCTTCCCTCCTGCACACAGGGCAGTCCTTACTCCCCACCACTCAGGCCA
CAGTGGGGCTGCAGGCAGGCGGCTCCTCCTACCCACCTCTGGGTCTTGGCTCCCGGGGGCCCCACCTCGGCAC
ACACTGTGCCCCACAAACTTCAGTGTGGTACAAGGTGGAGAAAGCATATCCCACCAACCTCCAGTGTGAGGGTC
CAGGAGAGCCTGGGGGTGGGGGACTGCCTTGCTCTAGTAGTGTGGCCTGTGCCAGCACCACAGCCGGTCAGAG
GAGCGCAGGCAGCGCAGGGCTGGCACGTGACAGGCTCGTCAGCCACCTGGGAACACAGTTCTGGGCAAAGAGGAT
CCGAGGTTGAGAGGAAGGAGGGTCCCGGTGTATCCTGGCCCTGGGGGTCTGGGCGTCCAGCTCAGCCCTGGCCTG
GCTGGGTGGTATTCTGGTAGGGATATGGCAGGACTCCTGGCAGGGCCACCTGCAGGACCCTGTCTGCAGTCCCA
CACTGTGCAGACCCAGTCCCACACTGTGGCCAGGCCTTACATCTGGCTGGAAAGCAGAGCCTCCTGGGAACACAT
CTGGCTGCACAGGCTGAAATATCCACCCAGCAGGCAGAGTGGCGTGGCCTCCCCATGGGCACAGTGGTGACCCCC
TTGATTCCACCGTACAACCCCTCCACCCCCCACTCAGTGCCTCCACATGCTGCCTGGCACAGACCAGGCCTTT
GACAAATAAATGTTCAATGGATGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4102

MDLDLLDLNPRIIAAIKKAKLKSVEVLHFSGPDILKRLTNLSSPEVWHLLRTASLHLRGSSILTALQLHQKQERF
PTQHQRSLGCPVLDALLRGGLPLDGITELAGRSSAGKTQLALQLCLAVQFPRQHGGLEAGAVYICTEDAFPHKR
LQQQMAQQPRLRTDVPGELLQKLRFQSQIFIEHVADVDTLLEC VNKKVPVLLSRGMARLVVIDSVAAPFRCEFD
QASAPRARHLQSLGATLRELSSAFQSPVLCINQVTEAMEEQGAAGPLGFWDERSVPALGITWANQLLVRLADR
LREEEAALGCPARTLRVLSAPHLPPSSCSYTI SAEGVRGTPGTQSH

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FIGURE 4103A

CAGGTGATCCTCTACGATCCCGCCGCCGGTCCCCAGGCAGCGCAGGCCCCCGGCCGAGCCGCCACTGCTGCAGTT
CCCAAGATGTTTGCCTTCGATGCCGTCTTCCCCAGGACTCCGAGCAGGCCGAAGTCTGCTCGGGGACCGTGGCC
GACGTGCTCCAGTCGGTGGTCAGTGGGGCTGATGGCTGCATTTTTTTCCTTTGGCCACATGAGCCTGGGCAAGTCG
TACACCATGATCGGGAAGGACAGCTACCCAGAGCCTGGGCATCGTGCCCTGCGCCATCTCTGGCTCTTCAGG
CTCATCGAGGAGCGCAGGGAGAGGACGGGCACCCGCTTCTCCGTCCGGGTCTCAGCCGTGGAGGTGTGCGGGCGC
GACCAGAGCCTGCGGGACCTGCTGGCCGAGGTGGCCCTGGCAGCCTCCAGGACACCCAGTCTCCGGGAGTGTAC
CTGCGGGAGGACCCCGTGTGTGGGGCGCAGCTCCAGAACCAGAGCAGCTGCGGGCACCCACGGCCGAGAAGGCG
GCTTTCTACCTGGATGCGGCCCTGGCGGCCCGCAGCACCAGCCGAGCGGGCTGTGGCGAGGACGCCGACGCAGC
TCCCACATGTTGTTACGCTGCACGTCTACCAGTACCGCATGGAGAAAGTGGGCCGGGGAGGAATGTCCGGAGGC
CGCAGCCGCTGCACCTCATCGACCTGGGCAGCTGTGAGGCGGGCGCTGGCAGGGCCGGGGAGGCTGCTGGGGGT
CCCTGTGTCTGTCCCTGTGCGCCCTGGGCAGCGTCATCTTGGCCCTGGTCAACGGAGCCAAGCATGTGCCGTAT
CGGGACCACAGGCTCACCATGCTGCTGCGTGAATCCCTGGCCACCGCTGGCTGCCGCACCAACCATGATCGCCAC
GTGTCGGATGCGCCAGCCAGCAGCAGAGACACTCAGCACCCTGCGAGCTGCGCCGCCCGCATCCACCGCCTGCGC
AGGAAGAAGGCCAAGTACGCCTCCAGTCTCTTGGCGGGGAGAGCTCCTGTGAGGAAGGCCGGGCCCGTGGCCCC
CCGCACCTGCGGCCCTTCCACCCACGCACTGTGGCCCTGGACCCCGACCGCACGCCTCCCTGCCTGCCCGGTGAC
CCCGATTACTCTCCAGCAGCGAGCAGTCTGTGACACGGTTCATCTACGTGGGGCCCGGTGGGGCGGCGCTGTCA
GACCGGGAGCTCACCAGACAACGAAGGTCCGCCTGACTTCGTGCCCATCATCCCTGCCCTGAGCCGCCACCGGCC
TCCAAGGGTCCCCGAGACGCAGACCACTTCCGCTGCAGCACCTTCGCGGAGCTGCAGGAGCGGCTGGAATGCATG
GACGGCAACGAGGGTCCCTCAGGAGGTCCAGGTGGCACCGACGGAGCTCAGGCCAGCCTCCGCCGAGGGGGCCGG
AAGCCCTCGCCACCAGAGGCTGCATCCCCAGGAAGGCTGTGGGCACCCCGATGGCTGCCAGCACCCCTCGAGGC
AGTTCGTGGTCCAGACACCCACAGGGTACCCCTGAGCCCTGCAAGGCCATTGTCTGGGGTGACCAGAGAGAGGAC
AGCAGCGCTTGGCCTGAGCTGCTGGTCCCGAAAAGGCTGCAGTGAGTGGAGGCAGGAGGCCACTGCCAGCCCG
GCTCCCCACCTCCTCAGTTGCTGGAAGCCTGCAGAGCCCCAGAAGAGCCTGGGGGAGGGGGCACTGATGGAGTG
GCACGGACCCCTCCCGTGGGCATGAGTGGGCAGGTGGCTGGGTCCCCGATGCTTCTGGGGCCACCTGCCCCCGC
CTGGCTGCTGGCAGTCGCTGTCCGAGCGGGGCTGCTACCAACACAGTGACCCTGCAGCGGCCAGTGGAGCTC
AACGGCGAGGAGCAGCTGGTGTTCACGGTGGTGGAGGAGCTGTCCCTGGGGGCGCTTGCCGAGCTGGGCGGCC
ACCAGCCTGGCTAGCTTCGACAGTGACTGCTCCCTGCGGGCCCTGGCCTCGGGGTCCCGGCCGTGAGCATCATC
AGCAGCATCAATGATGAGTTTGACGCTACACCTCTCAGGCCCTGAGGGGGGGCCCTGGAGGGGGCGCTGG
GCCGCGAGCAGTCACGGCTCCTCCATCAGCTCCTGGCTCAGCGAGGTGAGCGTCTGCACTGCCGACAGCCGTGAC
CCCACGCCGAGCCCCGCTTACGCCCCGACTCGCTGGCAGGGCTTGACCCTGGGGGCCCCCTGCCCTGGATGGT
TCCCTGGGGGATGGAAGCTCTGGGTTCTGGGGCCAGACAGACCTGACAGTCTGGGCCAACCTGGGGTCCGTGC
CCTGGGGAAGTGGCTGCAGTGGCCCCATCCCGACCCGGCAGGGAGCCCCAGGCCGGGCCCTCGCGGTGGGCATCC
GCAGCCCAGACCATCCACTCCAGCCTCCCCCGAAACCGAGGACTGCCTCTGCCACCACCCGTGTGGGTGTGCT
CGCCTGGGCCAGAGCCACCTGGCCGTGGAGGCCTGTTTGAGGACCCATGGCTGCTCCGGGTAGGGGAGTGTGAT
ACCCAGGCAGCTTCTGCTGGCAGGGCCCCAGCCCCACACTTGGCTCCCCCGGCTGCCTGAGGCCAGGTGATG
CTAGCCTGTGCCAGAGAGTGGTGGACGGGTGTGAGGTGGCAGCCAGGGCGGCCCGCAGGCCAGAGGCTGTGGCT
CGGATCCCACCGCTGCGGAGGGGTGCCACCACGCTGGGTGTGACAACGCCAGCTGTGTCTGGGGAGATGCTCCC
ACGGAGGTGGTGGCTGCTCGGGGAGCCTGAAGGCCTCCCCACCAGCAAGAAGGGTCTGGCTCCCAAGGCGGGC
TTCTTCCCGAGGCCAGTGGGGCGGCCCCCCCGGCCACCCACGCGGAAGTCCAGCCTGGAGCAGAGGAGCAGC
CCGGCCTCGGCCCTCCGCATGCTGTGAACCGGCGCGGGTGGGGCTGCTGCTGCTCTTCGAGGGGAGGAGGAG
CCCAGACCCAGCAGCCGGGCTGACCACTCTGTCCCAGGGCCACGTCCAGCCTGAAGGCCCGGGCCAGCAAGGTA
GAAGCGGCACACCGTCTCGCCGACACGCTCTTGGAGCGGTACGAAGGCCTGGCGCACAGCAGCAGCAAGGGC
CGGGAAGCCCTGGGCGGCCTCCCGGGCTGTACCAAGCTGGGTGTGCCACCCCTCCAGCCCCACACACGGTCCA
GCTCCCGCTGTAGGAGCGGCGCAGCAAGGCTGTGGGGGCCCCCAAGCCCCCTGTTGGTGGAGGCAAGGGCCGT
GGCCTAGTGGCTGGTGGGTGCGGGGCTTGGGGCTTCGGTGAAGCTGTCTACGGCCTCTGTGACGGGCAGGAGC
CCTGGCGGCCCTGTGGCAGGTCCAGAGCAGCCCCACGGGCCGGGCCAGTGTGGGGCGAAGGCTGGCCGGGT
ACCGTCATGGGCACAAAGCAGGCGCTCCGGGTGCTCAGACCGCGTCCATGAGCTGTGAGCCAGTGGAGCCCCG
GGCCGGGTGGCTCCTCGTGGGGCTCGGCGGACTCAGACAGCGGCCATGACAGCGGCGTGAACGTGGGGGAGGAG

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FIGURE 4103B

CGGCCACCCACGGGCCCCGGCCCTGCCCTCCCCCTACAGCAAGGTGACCGCCCCACGGCGGCCCCAGCGCTACAGC
AGCGGCCATGGCAGCGACAACAGCAGCGTGCTGAGTGGAGAGCTGCCGCCCCGCCATGGGGCCGCACCGCCCTTTTC
CACCACAGCGGTGGCAGCAGCGGCTATGAGAGCCTGCGGCGCGACAGCGAGGCCACCGGCAGCGCCTCCTCCGCC
CCTGACTCCATGAGCGAGAGTGGGGCTGCCTCCCCAGGCGCCCGCACCCGCAGCCTCAAGTCCCCCAAGAAAGAGG
GCCACAGGTCTGCAGCGGCGGCGCCTGATTCCCGCCCCACTGCCCGACACCACTGCCCTGGGCGGTAAGCCCAAGC
CTCCCCGGGCAGTGGGTGGACCTGCCCCGCCCCCTGGCTGGCTCCCTGAAGGAGCCGTTTCGAGATCAAGGTGTAC
GAGATCGATGACGTGGAGCGCCTTCAGCGGCCCCGCCACCCCGAGGGAGGCCCCACCCAGGGTCTGGCGTGC
GTCAGTACAAGGCTGCGGCTGGCGGAGCGCAGGCAGCAGCGGCTGCGGGAGGTGCAGGCCAAGCACAAAGCACCTG
TGTGAGGAGCTGGCCGAGACCCAGGGCCGGCTGATGCTGGAGCCTGGCCGCTGGCTGGAGCAGTTTGAGGTGGAC
CCGGAGCTGGAGCCCGAGTGGGCCGAGTACCTGGCGGCCCTGGAGCGAGCCACGGCGGCCCTGGAGCAGTGCCTG
AACCTGTGCAAGGCGCACGTATGATGGTCACCTGCTTCGACATCAGCGTTGCAGCCAGTGCTGCCATCCCCGGGG
CCGCAGGAGGTGGACGTCTGAGGCTGGGCGCCGGACAAGAGGAGGGGGCGTGCAGCGGGCTGGAGGACGGGACGT
GGGACGGAGCGAGGATGTGGTGGGGGCTGCGGGGGGAGGATGCGGAGGGGTTTCTGTGCAGGACGGGAGTCTCAG
AGAGGAGACGGAGTGTGGGGGAGGGAGGGCCGGCCACGCGGTGGACAGAGCGAGGGTGCCAGGGTGACCCGAAGA
CCGTCACCACCCGACAGCAACGCAAGTGCCTTTGACCTTGATTGGACTTTTCTCCCTTTTGCATTTGGTGCTAC
AGACTTGAGACACCAGCAGAAGTTGTGTTTCAGCCCGCCCCGCTGCGCCTGTCCGGGCCGGGGCTGGCGCCGGTT
GTGTTTGTGTCCACCTTGCTTTCTTTGCAGCCAAGCAGTTTTTGTGGAGTGGGACTTACCTGCACGCCCCAGGGG
TCTTTCAGGATTTCAGGATGACTTTTCTTTTACAATGGTTTCTCTCGGCAGAGCCCGGGTTGTGGGGGATCTGTG
TGGGTTCTCAACGCAGATCCATCCTGGGGTCTCCCGGGCAGGGATGGCTGACCTCGAGTCCCCTCCCTTCCCGAG
AACCTGCTCTGTCCCGAGGGCAGCTAACAAGGGCTGAGCCCCAGGTACAGGTTGCCTCCTCCACGGCAGGAATTT
TTACCAAAACCACAAGCAAAAAACAAAACAGACCACCACGACCAACAACAAAGATGGGGGGTAGGGTTTTGTAAA
GGTTCTGTAGGTTTCATATTTTTATATCATTTTGGCCATAAATGCGGAATTTGCCGTGGGAATTTGAAGACAAAT
GATCTATGTTTTATGGTTTTCTAGGGAAGGTGTTCTGGGGGCCGGGCTCTCTCCAGCTGTGGGAGGCCTGCTCC
CTCTGGGGGGCACCTGGGCAGGTGGGGGGGCTTGGGAGGCGCTTCTTGCCAAATGCAGACGAGGGGTGAGCC
TGCCAGCGTTTGCGACGTCCCCGCACGACAGGCTCATACTTTCTGAGGATCGTGCATAGCATAGGACGTCTGAAC
CTTTGTACAAATGTGTAGATGACATCTTGCTACAGCTTTTATTTGTGAATTAAAGATGCATTGATGGTT

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FIGURE 4104

MHLLQAPASHEDLDAPHGGPSLAPPSTTTSSRDTPGPAGPAGRQPGRAGPDRTKGLAWSFGPSVQVSVAPAGLGG
ALSTVTIQAQQCLEGMWSVSRVNSFLPPACLAEEAAVAVAVADTVRECFFVAGPDGLSKAWGRGGVCTSA LVTP
PGSVGGSTGPSAAASFFIRAMQKLSLASKRKKPHPPPPATRGTSYPTDFSGVLQLWPPPPAPPCLLRAASKTKD
NPGSIGKVKVMLRIWPAQGAQRSAEAMSLKVDPRKKQVILYDPAAGPPGSAGPRAATAAVPKMFAFDVFPQD
SEQAEVCSGTADVLSVSVSGADGCIFSGHMSLGKSYTMIGKSSPQSLGIVPCAISWLFRLIEERRERTGTRF
SVRVSAVEVCGRDQSLRDLLAEVAPGSLQDTQSPGVYLREDPVCQAQLQNQSELRAPTAEKAAFYLDAAALAA
SRAGCGEDARRSSHMLFTLHVYQYRMEKCGRGGMSGGRSRLHLIDLGSCEAAAGRAGEAAGGPLCLSLSALGSVI
LALVNGAKHVPYRDHRLTMLLRESLATAGCRTTMAHVSDAPAQHAETLSTVQLAARIHRLRRKKAKYASSSSGG
ESSCEEGRARRPPLRPFHPRTVALDPDRTPPCLPGDPDYSSSEQSCDTVIYVGPGGGAALSDRELTDNEGPPDF
VPIIPALSRHRPSKGRPRADHFRCTFAELQERLECMGNEGPGGGPGGTGDAQASPARGGRRKPSPEEAASPRKA
VGTPMAASTPRGSSGPDTHQGTPEPCKAIVWGDQREDSSAWPELLVPEKAAVSGGRRPLPSPAPPPPQLLEACRA
PEEPGGGGTDGVARTPFVGMMSGQVAGSPMLPGATCPRLAAGSRCPERGLITTTVTIQRVPELNGEDELVFTVVEE
LSLGALAGAGRPTSLASFDSDCSLRALASGSRPVSIISSINDEFDAYTSQAEPPGLEGAAWAGSSSHGSSISSWL
SEVSVCTADSRDPTPQPRFSPDSLGLDPGGPPALDGSGLDGSSGFLGPDPRPDSGPTWGPCPGEVAAVAPSRPG
REPQAGPSRWASAAQTIHSSLPRKPRTASATTRVGCARLGQSPPGRGGLFEDPWLLRVGECDTQAASAGRAPSPT
LGSPRLPEAQVMLACQQRVVDGCEVAARAARRPEAVARIPPLRRGATTLGVTTPAVSWGDAPEVVACSGSLKAS
PTSKKGLAPKAGFLPRPSGAAPPAPPTRKSSLEQRSSPASAPPHAVNPARVGAAAVLRGEEPRPSSRADHSVPR
ATSSLKARASKVEAAHRLAGHASLERYEGLAHSSSKGREAPGRPPRAVFKLGVPSSPETHGPAPACRSGAAKAVG
APKPPVGGGKGRGLVAGGSRALGPSVKLSTASVTGRSPGGPVAGPRAAPRAGPSVGAKAGRGTVMGKQALRAAH
SRVHELASGAPGRGSSWGSADSDSGHDSGVNVGEERPPTGPALPSPYSKVTAPRRPQRYSSGHGSDNSSVLSG
ELPPAMGRITLFFHSGSSGYESLRDSEATGSASSAPDSMESGAASPGARTSLKSPKKRATGLQRRRLIPAP
LPDTTALGRKPSLPGQWVDLPPPLAGSLKEPFEIKVYEIDDVERLQRPRPTPREAPTQGLACVSTRLRLAERRQQ
RLREVQAKHKHLCEELAETQGRMLLEPGRWLEQFEVDPELEPESA EYLAALERATAALEQCVNLCKAHVMMVTCTF
DISVAASAAIPGPQEVDV

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FIGURE 4105

CACTACTGCCCTGCACCTGCAGCCCCCGTGGCGGGAGGCATGGAGGAGGTTCATCGTGGCCCAGGTGGACCATG
GCTTGGGCTCAGCATGGGTCCCCAGCCATCGGCGGGTGAACCCACCCACACTGCGCATGAAGAAGCTGAAGTGGC
AGAAGCTGCCATCCAACGTGGCACGTGAGCACAATCTATGTGGCGTCCCTGAGCAGCCCCGACGCCGAGGCTG
TGGAGCCCCGACTTCTCCAGCATCGAGCGACTATTCTCCTTCCCTGCAGCCAAGCCCAAGGAGCCCCACCATGGTGG
CCCCCGGGGCCAGGAAGGAGCCCAAGGAGATCACTTTCCTCGATGCCAAGAAGAGCCTGAACCTCAACATCTTCC
TGAAGCAATTTAAGTGCTCCAACGAGGAGGTGCTGCTATGATCCGGGCTGGAGATACCACCAAGTTTGATGTGG
AGGTTCTCAAACAACCTCCTTAAGCTCCTTCCCGAGAAGCAGCAGATTGAAAACCTGCGGGCATTACAGAGGAGC
GAGCCAAGCTGGCCAGCGCCGACCATTCTACCTCCTTCTGCTGGCCATTCCCTGCTACCAAGCTGCGAATCGAGT
GCATGCTGCTGTGTGAGGGCGCGGCCGCCGTGCTGGACATGGTGCGGCCCAAGGCCAGCTGGTGCTGGCTGCCT
GCGAAAGCCTGCTCACCAGCCGCCAGCTGCCCATCTTCTGCCAGCTGATCCTGAGAATTGGGAACCTTCTCAACT
ACGGCAGCCACACCGGTGACGCCGACGGCTTCAAGATCAGCACATTGCTGAAGCTCACGGAGACCAAGTCCAGC
AGAACC CGCTGACGCTGCTGCACCACGTGCTGGAGGAAGCGGAAAAGAGCCACCCGACCTCCTGCAGCTGCCCC
GGGACCTGGAACAGCCCTCGCAAGCAGCAGGGATCAACCTGGAGATCATCCGCTCAGAGGCCAGCTCCAACCTGA
AGAAGCTTCTGGAGACCGAGCGGAAGGTGCTGCCCTCCGTGGCCGAGGTCCAGGAGCAGTACACCGAGCGCCTCC
AGGCCAGCATCTCGGCCTTCCGGGCACTGGATGAGCTGTTTGAGGCCATCGAGCAGAAGCAACGGGAGCTGGCCG
ACTACCTGTGTGAGGACGCCAGCAGCTGTCCTGGAGGACACGTTTACGACCATGAAGGCTTTCCGGGACCTTT
TCCTCCGCGCCCTGAAGGAGAACAGGACCGGAAGGAGCAGGCGGCGAAGGCAGAGAGGAGGAAGCAGCAGCTGG
CGGAGGAGGAGGCGCGGCCCTCGGGGAGAGGACGGGAAGCCTGTGAGGAAGGGGCCCGGGAAGCAGGAGGAGG
TGTGTGTCATCGATGCCCTGCTGGCTGACATCAGGAAGGGCTTCCAGCTGCGGAAGACAGCCCGGGGCCCGGGG
ACACCGAGGGGGCAGCAAGGCAGCCTCCATGGATCCCCAAGAGCCACAGAGCCTGTGGCCACCAAGTAACCTG
CAGGAGATCCCGTGGGCAGCACGCGCTGTCCCGCCTCTGAGCCCGCCTTGATGCTACAACAGCCAGCGAGTCCC
GGGGCTGGGACCTTGTAGACGCCGTGACCCCGGCCCTCAGCCACCCCTGGAGCAGTTGGAGGAGGGTGGTCCAC
GGCCCCTGAGAGGCGTTCTTCTGGTATGTGGATGCCAGCGATGTCTTAACCACTGAGGATCCCCAGTGCCCCC
AGCCCTTGAGGGGGCCTGGCCGGTGACTCTGGGAGATGCTCAGGCCCTGAAGCCCTCAAGTTCTCCAGCAACC
AGCCCCCTGCAGCCGGAAGTTCAAGGCAAGATGCCAAGGATCCACGTCCTTGCTGGGCGTCCTCCAGGCCGAGG
CCGACAGCACAAGTGAGGGGCTGGAGGACGCTGTCCACAGCCGTGGTGCCAGACCCCTGCAGCAGGCCAGGTG
GGGATGAGGACGAGGACGAGGAGACACGGCCCCAGAGTCCGCACTGGACACATCCCTGGACAAGTCTTCTCCG
AGGATGCGGTGACCGACTCCTCGGGTTCGGGCACACTCCCCAGGGCCCGGGGCCGGCCCTCAAAGGGGACCGGGA
AGCGAAGGAAGAAGCGTCCCTCCAGGAGCCAGGAAGGCCTCAGGCCAGGCCCAAGGCCAAGTGAGAGAGCCAG
GCCACAGGACATGCTGCCATTCTGCCAAGAGAGGCTCTTCTGGGGGCCAGGCTGGGACTGGGCCCCGGAACCAA
AACTCCGTGCCCTTACCCAGCCGGGGCCCTCCTGGAGCCTTCTTGGGGTGTGTGGCTGGGAACCCGACAGGCACC
AGTGCCCTGCCAGGCCTGGTGCCCTCCTGGACCGCCTGCACGTGCCAGCCTCCACCTGCTTCTTAAGGCAACC
CTGGCCACACCCGATGCGCCCGTGCAGCCTGCCAAGGGCCAGTCGGGGGTGCTGCGTCTGCCAGTGTTCA
CCACAGCTCTGCTGCCCTTCAGCCCCAGCAAGGTTTAATCAAAATGCAATGCTTTGCAAGTCTTTACTGCTTGGA
GGTGCTGAGTTGGGGGCCCTGGGCAGGGGTAAGCTGGCAGGCAGTGCCATGGCAGGCCAGGGTCCCCTCCCATG
GGGTCTGGCCCCCGTTCCAGCATGTCCAGCCCCGTAAGTTGGAGTGGGGGGCGGTCTGCCTTTGCTGCCACTGCC
AGGCCTCTGCCCTGCAGCTGAAACTTGGCCATCACATCAACAGAAAACCCCTCCAGTGCCAGCTGCCAGCGTG
GGCAGGCCCTGGGGACAATACAGGTCCACCTGAGGGGCTGCAGGGTGACACCCAGCAGCCGCTGCCCCCTACTG
CCCACCCAGCGAGGGCAGCCTACCCGAGCCTGCCCCCTGCCAGGTGTGTGCCCTGAGGCTGGCGGCTGGATGCGT
GGCCAATAAAAAAGCAGACCTAG

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FIGURE 4106

GCGGCCGGGGAGCTGCGTAGCTCCCGGCCCCGCGGCCATGCCCAAGCGGAGCTGCCCCCTTCGCGGACGTGGCCCC
GCTACAGCTCAAGGTCCGCGTGAGCCAGAGGGAGTTGAGCCGCGGCGTGTGCGCCGAGCGCTACTCGCAGGAGGT
CTTCGAGAAGACCAAGCGACTCCTGTTCCCTCGGGGCCCCAGGCCTACCTGGACCACGTGTGGGATGAAGGCTGTGC
CGTCGTTTACCTGCCAGAGTCCCCAAAGCCTGGCCCTACAGGGGCCCCGAGGGCTGCACGTGGGCAGATGCTGAT
TGGACCAGACGGCCGCCTGATCAGGAGCCTTGGGCAGGCCTCCGAAGCTGACCCATCTGGGGTAGCGTCCATTGC
CTGTTCCCTCATGCGTGCGAGCCGTGGATGGGAAGGCGGTCTGCGGTCACTGTGAGCGAGCCCTGTGCGGGCAGTG
TGTGCGCACCTGCTGGGGCTGCGGCTCCGTGGCCTGTACCCTGTGTGGCCTCGTGGACTGCAGTGACATGTACGA
GAAAGTGCTGTGCACCAGCTGTGCCATGTTTCGAGACCTGAGGCTGGCTCAAGCCGGCTGCCTTCACCGGGAGCCA
CGCCGTGCATGGCAGCCTTCCCTGGACGAGCGCTCGGTGTTTCACTGAACTGTGGGGTCGACGGGAGGGGTGCC
TTTTACATGTTCTATTTTGTATCCTAATGACAGAATGAATAAACCTCTTTATATTTGCAAAAAAAAAAAAAAAAAA

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FIGURE 4107

MPKRSCPFADVAPLQLKVRVSQRELSRGVCAERYSQEVFEKTKRLLFLGAQAYLDHVWDEGCAVVHLPESPKEGP
TGAPRAARGQMLIGPDGRLIRSLGQASEADPSGVASIACSSCVRAVDGKAVCGQCERALCGQCVRTCWGCGSVAC
TLCGLVDCSDMYEVLCTSCAMFET

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FIGURE 4108

GCGGCCGGGGAGCTGCGTAGCTCCCGGCCCCGCGGCCATGCCCAAGCGGAGCTGCCCCCTTCGCGGACGTGGCCCC
GCTACAGCTCAAGGTCCGCGTGAGCCAGAGGGAGTTGAGCCGCGGCGTGTGCGCCGAGCGCTACTCGCAGGAGGT
CTTCGACCCATCTGGGGTAGCGTCCATTGCCTGTTCCCTCATGCGTGCAGCCGTGGATGGGAAGCGGTCTGCGG
TCAGTGTGAGCGAGCCCTGTGCGGGCAGTGTGTGCGCACCTGCTGGGGCTGCGGCTCCGTGGCCTGTACCCTGTG
TGGCCTCGTGGACTGCAGTGACATGTACGAGAAAGTGCTGTGCACCAGCTGTGCCATGTTGAGACCTGAGGCTG
GCTCAAGCCGGCTGCCCTTACCAGGGAGCCACGCCGTGCATGGCAGCCTTCCCTGGACGAGCGCTCGGTGTTTACA
CTGAAGTGTGGGGTCGACGGGAGGGGTGCCTTTTACATGTTCTATTTGTATCCTAATGACAGAATGAATAAACC
TCTTTATATTTGCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4109

MPKRSCPFADVAPLQLKVRVSQRELSRGVCAERYSQEVFDP SGVASIACSSCVRAVDGKAVCGQCERALCGQCVR
TCWGCGSVACTLCGLVDCSDMYEKVLCTSCAMFET

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FIGURE 4110

ATCCTGGGACAGGGCACAGGGCCATCTGTACACAGGGGCTTAGGGAAGGCCGAGCCAGCCTGGGTCAAAGAAGTC
AAAGGGGCTGCCTGGAGGAGGCAGCCTGTCAGCTGGTGCATCAGAGGCTGTGGCCAGGCCAGCTGGGCTCGGGGA
GCGCCAGCCTGAGAGGAGCGCGTGAGCGTCGCGGGAGCCTCGGGCACCATGAGCGACGTGGCTATTGTGAAGGAG
GGTTGGCTGCACAAACGAGGGGAGTACATCAAGACCTGGCGGCCACGCTACTTCCTCCTCAAGAATGATGGCACC
TTCATTGGCTACAAGGAGCGGCCGAGGATGTGGACCAACGTGAGGCTCCCTCAACAACCTTCTCTGTGGCGCAG
TGCCAGCTGATGAAGACGGAGCGGGCCCCGGCCCAACACCTTCATCATCCGCTGCCTGCAGTGGACCCTGTCATC
GAACGCACCTTCCATGTGGAGACTCCTGAGGAGCGGGAGGAGTGGACAACCGCCATCCAGACTGTGGCTGACGGC
CTCAAGAAGCAGGAGGAGGAGGAGATGGACTTCCGGTCGGGCTCACCCAGTGACAACCTCAGGGGCTGAAGAGATG
GAGGTGTCCCTGGCCAAGCCCAAGCACCGCGTGACCATGAACGAGTTTGAGTACCTGAAGCTGTGGGCAAGGGC
ACTTTCGGCAAGGTGATCCTGGTGAAGGAGAAGGCCACAGGCCGCTACTACGCCATGAAGATCCTCAAGAAGGAA
GTCATCGTGGCCAAGGACGAGGTGGCCACACACTCACCGAGAACC CGCTCCTGCAGAACTCCAGGCACCCCTTC
CTCACAGCCCTGAAGTACTCTTTCAGACCCACGACCGCCTCTGCTTTGTCTATGGAGTACGCCAACGGGGGCGAG
CTGTTCTTCCACCTGTCCCGGGAACGTGTGTTCTCCGAGGACCGGGCCCGTTCTATGGCGCTGAGATTGTGTCA
GCCCTGGACTACCTGCACTCGGAGAAGAACGTGGTGTACCGGGACCTCAAGCTGGAGAACCTCATGCTGGACAAG
GACGGGCACATTAAGATCACAGACTTCGGGCTGTGCAAGGAGGGGATCAAGGACGGTGGCCACCATGAAGACCTTT
TGCGGCACACCTGAGTACCTGGCCCCGAGGTGCTGGAGGACAATGACTACGGCCGTGCAGTGGACTGGTGGGGG
CTGGGCGTGGTCACTGTACGAGATGATGTGCGGTGCGCTGCCCTTCTACAACCAGGACCATGAGAAGCTTTTTGAG
CTCATCCTCATGGAGGAGATCCGCTTCCCGCGCACGCTTGGTCCCGAGGCCAAGTCCTTGCTTTCAGGGCTGCTC
AAGAAGGACCCCAAGCAGAGGCTTGGCGGGGGCTCCGAGGACGCCAAGGAGATCATGCAGCATCGCTTCTTTGCC
GGTATCGTGTGGCAGCACGTGTACGAGAAGAAGCTCAGCCACCCCTCAAGCCCCAGGTACGTCGGGAGACTGAC
ACCAGGTATTTTGATGAGGAGTTCACGGCCAGATGATCACCATCACACCACCTGACCAAGATGACAGCATGGAG
TGTGTGGACAGCGAGCGCAGGCCCCACTTCCCCCAGTTCTCCTACTCGGCCAGCAGCACGGCCTGAGGGCGCGGT
GGACTGCGCTGGACGATAGCTTGGAGGGATGGAGAGGCGGCCTCGTGCCATGATCTGTATTTAATGGTTTTATT
TCTCGGGTGCATTTGAGAGAAGCCACGCTGTCTCTCGAGCCCAGATGGAAAGACGTTTTTGTGCTGTGGGCAGC
ACCTCCCCCGCAGCGGGGTAGGGAAGAAAATATCCTGCGGGTTTTAATTTATTTTATCCAGTTTGTCTCCGG
GTGTGGCCTCAGCCCTCAGAACATCCGATTACGTAGGGAAAATGTTAAGGACTTCTACAGCTATGCGCAATGTG
GCATTGGGGGGCCGGGCAGGTCTGCCATGTGTCCCTCACTCTGTGAGCCAGCCGCCCTGGGCTGTCTGTAC
CAGCTATCTGTATCTCTCTGGGGCCCTGGGCCTCAGTTCAACCTGGTGGCACCAGATGCAACCTCACTATGGTA
TGCTGGCCAGCACCTCTCCTGGGGGTGGCAGGCACACAGCAGCCCCCAGCACTAAGGCCGTGTCTCTGAGGAC
GTCATCGGAGGCTGGGCCCCCTGGGATGGGACCAGGGATGGGGGATGGGCCAGGGTTTACCCAGTGGGACAGAGGA
GCAAGGTTTAAATTTGTTATTGTGATTATGTTGTCAAATGCATTTTGGGGGTTTTAATCTTTGTGACAGGAA
AGCCCTCCCCCTTCCCCTTCTGTGTACAGTTCTTGGTGACTGTCCACCGGAGCCTCCCCCTCAGATGATCTCT
CCACGGTAGCACTTGACCTTTTCGACGCTTAACCTTTCCGCTGTGCGCCAGGCCCTCCCTGACTCCCTGTGGGG
GTGGCCATCCCCTGGGCCCCCTCCACGCCTCCTGGCCAGACGCTGCCGCTGCCGCTGCACCACGGCGTTTTTTTACA
ACATTCAACTTTAGTATTTTTTACTATTATAATATAATATGGAACCTTCCCTCAAATTCT

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FIGURE 4111

MSDVAIVKEGWLHKGREYIKTWRPRYFLLKNDGTFIGYKERPQDQREAPLNNFSVAQCQLMKTERPRPNTFII
RCLQWTTVIERTFHVETPEEREETTAIQTVADGLKKQEEEEMDFRSGSPSDNSGAEEMEVS LAKPKHRVTMNEF
EYLKLLGKGTFGKVILVKEKATGRYYAMKILKKEVIVAKDEVAHTLTENRVLQNSRHFFLTALKYSFQTHDRLCF
VMEYANGGELFFHLSRERVFSEDRARFYGAIEVSALDYLHSEKNVVYRDLKENLMLDKDGHKIDFGLCKEGI
KDGATMKTFCGTPEYLAPEVLEDNDYGRAVDWWGLGVVYEMMCGRLPFFYNQDHEKLFELILMEEIRFPRTLGP
AKSLLSGLLKKDPKQRLGGGSEDAKEIMQHRFFAGIVWQHVEKKLSPPFKPQVTSETDTRYFDEEFTAQMITIT
PPDQDDSMECVDSERRPHFPQFSYSASSTA

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FIGURE 4112

AGCCTGCAGCGGCAGTCGCTCCTGGACATGTCTCTGGTGAAGTTGCAGCTTTGCCACATGCTTGTGGAGCCCAAC
CTGTGCCGCTCAGTCCTCATTGCCAACACGGTCCGGCAGATCCAAGAGGAGATGACGCAGGATGGGACGTGGCGC
ACAGTGGCACCACAGGCTGCAGAGCGGGCGCCGCTCGACCGCTTGGTCTCCACGGAGATCCTGTGCCGTGCAGCG
TGGGGGCAAGAGGGGGCACATCCTGCTCCTGGCTTGGGGGACGGCCACACACAGGGTCCAGTTTCTGACCTTTGC
CCAGTCACCTCAGCACAGGCACCAAGGCACCTGCAGAGCAGCGCTGGGAGATGGATGGCCCTCGAGAAAACAGA
GGAAGCTTTCACAAGTCACCTTGATCAGATATTTGAAACGCTGGAGACTAAAAACCCAGCTGCATGGAAGAGCTG
TTCTCAGACGTGGACAGCCCCTACTACGACCTGGACACAGTACTGACAGGCATGATGGGGGGTGCCAGGCCGGGC
CCCTGCGAAGGGCTCGAGGGCTTGGCTCCGGCCACCCAGGCCCTAGCTCCAGCTGCAAGTCCGACCTGGGCGAG
CTGGACCACGTGGTGGAGATCCTGGTGGAGACCTGAGCAGGAGCCCTGAGTGCTCACAGCCGCCTCTGACGCATT
GACACGTGAGCACTGGCTCCACGGAGGGTGCGCTGCCGCCAGCGGCCAGCCTTGCTGCCCTGTCTGCTGATT
CTGAGAAATCCCAGAACAGCCCATTACAGTGGGGCTGCAGCCCTAGGCCCGTCCCACTCACCTCCCCCTGTGG
AGCGCCAGGCAGAGGCTGTTCTGGAAGGCTTCTTGCTTCTGACGTCCCCACAGCCCTGGGGCCCTCGTGCTCTCT
TTGTGTCCCCACTGTAGAGGACGGTGAGCCGCAGCTGCATCAACCTCCTTTTACCTTTAGATAGGTGAATTTTT
ACAATTCAGTTTTACATGTTTTGGGCAGTATTTTGTCTTAAGATATATTTTTTAACTTTTTATACCTTATCTCT
TTAGATTTTTTTCAGCTATTTTCTTAAAGTATATTTTTTCTATAAACATCCTTTGCTGCTACATTAGAACTTTTA
TAGCCTAAACAATTGCAGTTGGTGTGTTTCATTTTTTAAAGGTTTAAATAAGGGTTTTTGTGTTTTGTTTT
TTGCAGTGAGCATCACTACAGTCTCAGTCAACAGTGTGAATGTATCATGTTTTACTTTAAATGTGTGTGTGATAC
TTCTTCATTATGTCTGCGCTGCAGTGAGACCTGGGTGAAAATCAGGAGCCGCACACAGCCACATCTTCCTAGAC
CTAAGAGTAAATTATGGAGGATTTTATTTATGTCTATTTATATGTAAATGTCATTGAAGACAAAGGTCAAATATT
TGCTGTTTGTAGATCACAGGCACCAGTTGGTCTTCAGGGACCTCATAGCCCCCTCGGTGGTGCCTTCTCAAGGCA
GTGTTCTGGAGGCTCCCATCAGGGTCAGCCCATGCACCTGCCCTGGGTGAGGAAGTAGCATTGCTGCTGGATGA
GAAACGCCTGCGCTGCTCTGTTAGACTGGTGCTGAAACAAAAGGTTAAGGCTAGGTTGAAGTCTAGAATGAAAGA
AATCTGAATCCATGTCATTCAIAACCCCTTGATCTGTAGTGTGTCATGGGTGCTGCCGCAGGCAGGGAGTGAGCTGG
GGGTGCCTGCAGCCTTCCACTCCTGCCCCGCTCACCCACATGCTCCCTGTTTCTCATGCTTTCTCTAACTTCC
TCACCCCTTAACCAAAAAGGTGTGTTTTCTTTTGTGCATATAGCCATTCTTAAATATCAGTGATGTAAACCTCAC
TTTATTAAAAAATTATCCAGCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4113

MFARGLKRRKCVGHEEDVEGALAGLKTVSSYSLQRQSLLDMSLVKLQLCHMLVEPNLCRSVLIANTVRQIQEEMTQ
DGTWRTVAPQAAERAPLDRLVSTEILCRAAWQEGAHAPAGLGDGHTQGPVSDLCPVTSAQAPRHLQSSAWEMDG
PRENRGSFHKSLDQIFETLETKNPSCMEEELFSDVDSPIYDLDTVLTGMMGGARPGPCEGLEGLAPATPGPSSSCK
SDLGELDHVVEILVET

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FIGURE 4114

TCTCCAACAAAGGCCTCCCAGCCCCCATCGAGAAATGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGG
CTTCTACCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACAACCTACAAGACCACACCTCC
CATGCTGGACTCCGACGGCTCCTTCTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAA
CGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCTCCGGG
TAAATGAGTGCCACGGCCGGCAAGCCCCCGCTCCCCAGGCTCTCGGGGTCGCGTGAGGATGCTTGGCACGTACCC
CGTGTAATACTTCCCAGGCACCCAGCATGGAAATAAAGCACCCAGCGCTGCCCTGGGCCCCCTGC

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FIGURE 4115

GGACTCCCCCTCGCCCTCTGACACAGAAACCACCAGAAGAAAAGGGAACTTCAGGAACCTCCACCAAGGGCCCAT
CCGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGCCGCCCTGGGCTGCCTGGTCAAGGACT
ACTTCCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCC
TACAGTCCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACGAAGACCTACA
CCTGCAACGTAGATCACAAGCCCAGCAACACCAAGGTGGACAAGAGAGTTGAGTCCAAATATGGTCCCCCATGCC
CATCATGCCCAGCACCTGAGTTCCTGGGGGGACCATCAGTCTTCTGTTCCCCCAAAACCCAAGGACACTCTCA
TGATCTCCCGGACCCCTGAGGTCACGTGCGTGGTGGTGGACGTGAGCCAGGAAGACCCCGAGGTCCAGTTCAACT
GGTACGTGGATGGCGTGGAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTTCAACAGCACGTACCGTG
TGGTCAGCGTCCTCACCGTCTGCACCAGGACTGGCTGAACGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAG
GCCTCCCGTCCCTCCATCGAGAAAACCATCTCCAAGCCAAAGGGCAGCCCCGAGAGCCACAGGTGTACACCCTGC
CCCCATCCCAGGAGGAGATGACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTACCCCAGCGACA
TCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACAATAAGACCACGCCTCCCGTGTGGACTCCGACG
GCTCCTTCTTCTCTACAGCAGGCTAACCGTGGACAAGAGCAGGTGGCAGGAGGGGAATGTCTTCTCATGTCCG
TGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCTGGGTAAATGAGTGCCAGGGC
CGGCAAGCCCCGCTCCCCGGGCTCTCGGGTTCGCGCAGGATGCTTGGCACGTACCCCGTCTACATACTTCCCA
GGCACCAGCATGGAAATAAAGCACCCACCACTGCCCTGGG

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FIGURE 4116

CACCCCTCCTCTGGAGAAGCCCCTAGATCACAGCTCCTCACCATGGACTGGACCTGAAGGATCCTCTTCTTGATG
GCAGCAGCAACAGGTGCCCACTCCCTGCAGCTGGTGCAGTCTGGGCCTGAGGTGAAGAAGCCTGGGGCCTCAGTG
AAGGTCTCCTATAAGTCTTCTGGTTACACCTTCACCATCTATGGTATGAATTGGGTATGATAGACCCCTGGACAG
GGCTTTGAGTGGATGTGATGGATCATCACCTACACTGGGAACCCAACGTATACCCACGGCTTCACAGGATGGTTT
GTCTTCTCCATGGACACGTCTGTTCAGCACGGCGTGTCTTCAGATCAGCAGCCTAAAGGCTGAGGACACGGCCGAG
TATTACTGTGCGAAGTACACAGTGTGGAACCCACATCCCGAGAGTTTCAGAAAGCCTGAGGAAGGAGGCAGCTG
TGCTGAGCTGAGGCAGTGAGCTCTGTTCACAGGCCACATGGACCTAAATCCTTGATGGAGATTACAGGACTACGTA
AATTGGACTGATCGTTTTTATGCTGTTAAATTAATAGAAGGCCAGCCCACTTGTTTCAGCTCCTAAGAAGAGAGCC
CAGGTTTATCCAGATTATACAACACAACCAGCTTCTGATGACTCTCCTGTTACAACATCCATGGAGATATTTTGT
GTATTATATAATTACCAAATAATGTGAAATGCCCAAGTTGCAATACTGCACACCCTAGGGTATGTTCTTGCAA
TTCAGCGGAGGAGAAATTCCTTCAGAGACAGATGGATCTGAATTGGGGTCCTGTCCCAGGTGCAGCTACAGCAGT
GGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCTTCAGTGGTT
ACTACTGGAGCTGGATCCGCCAGCCCCAGGGAAGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGGAAGCA
CCAACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGC
TGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAG

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FIGURE 4117

MTLLLQHPWRYFVYYIIHQTNVKCPSCNTAHPRVCSNSAEKFFQRQMDLNWGPVPGAATAVGRRTVEAFGDPV
PHLRCLWWVLQWLLLELDPPAPREGAGVDWGNQS

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FIGURE 4118

GCTCACATGGGAAGTGCTTTCTGAGAGTCATGGACCTCCTGCACAAGAACATGAAACACCTGTGGTTCTTCCTCC
TCCTGGTGGCAGCTCCCAGATGGGTCTGTCCCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTT
CGGAGACCCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGC
CCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGAAGCACCAACTACAACCCGTCCCTCAAGA
GTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCGGACA
CGGCTGTGTATTACTGTGCGAGAGGCACAGTGAGGGGAGAAGAGGAAGAGACACCAGAGACCTCTCACTTTTCAC
GTGCACACAGAGAAGAGGCCATGTGGAGACGTAGTGCCTAGAAAGGTGGCCCTGTGCAAGCCAGGAAGAAGCCAT
ACTAAGAACCAATTTTGCCAGCTCCTTGATCTTCGACATTCAGACTGTAGAATTGTAAGAAAATCAATATTTGTT
GTTTAAGCCACCCAATCCTGTTGTCTTCTTACGAAGACCCAACTGACTAATACCACCTAACTCTGTTAGCTCTG
TCTCCTGGAGGGGAGAAGCAGCCCCCTGAGGCTGGGCACTGCATCTCTCAGATTTCCACGTGAAGTAGGCAAAAAT
AGTAGTTCTCATATAAAAAATGTGTCATGGCTCTGTTGGCCATTTTTGAGCATGGTCTCTGAAACCAGCCCTGGTG
TGTGTGTGTAACAAATGTCCCTTATCTTTTATTTGGACATAACAAATAGACGATAGGTACCAGCTG

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FIGURE 4119

CTCTTTCCAGCCAGCGCCGAGCGATGGGCACCTCTCGGGACAACCTGGCACAAGGGCCGCAAAGCTGGGGGCAAGA
GAAGGCCCTGCCACAAGAAGCGGAAGTATGAGTTGGGGCGCCAGCTGCCAACAGCAAGACTGACCCGTGCCGCA
TCCACACAGTCCGTGTGCGAGGAGGTAACAAGAAATACTGTGCCCCGAGGCTGGACGTGGGGAATTTCTCCTGGG
GCTCAGAATGCTGCGCTGGTGAAACAAGGGTCATCGATGTTGTCTACAATGCATCCAATAACGAGCTGGTTCGTA
CCAAGACCGTGGTGGAAGAATTGCATCGTGCCCATCGACAGCACGCCCTACCGACAGTGGTACGAGTCCCCTGTG
CACTGCCCTGGGCCGCAAGAAGGGAGCCAAGCTGACTCCTGAGGAAGAAGAGATTTTAAACAAAAACGATCTA
AAAAAATTCAGAAGAAATATGATGAAAGGAAGAAGAATGCCAAATGAGCAGTCTCCTGGGGGAGCAGTTCCAGC
AGGGCAAGCTTCTTGCGTGATGGCTTCAAGGCCGGGACAGTGTGGCCGAGCAGATGGCTATGTGCTAGAGGGCA
AAGAGTTGGAGTTCTATCTTAGGAAAAATCAAGGCCAGAAAGGCAAATAAATCCTTGTTTTGTCTTCACCCATGT
AATAAAGGTGTTTATTGTTTTGTTCCCA

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FIGURE 4120

CTTCCACCAAGGGCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCTGGGGGCACAGCGGCCCTGG
GCTGCCTGGTCAAGGACTACTTCCCAGAACCGGTGACGGTGTCGTGGAACCTCAGGCGCCCTGACCAGCGGCGTGC
ACACCTTCCCGGTGTCTTACAGTCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCT
TGGGCACCCAGACCTACACCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAGAGTTGAGCTCA
AAACCCCACTTGGTGACACAACCTCACACATGCCCACGGTGCCAGAGCCCAAATCTTGTGACACACCTCCCCCGT
GCCACGGTGCCAGAGCCCAAATCTTGTGACACACCTCCCCATGCCACGGTGCCAGCACCTGAACTCCTGG
GAGGACCGTCAGTCTTCTTCCCCCAAAACCAAGGATACCCTTATGATTTCCCGGACCCCTGAGGTCACGT
GCGTGGTGGTGGACGTGAGCCACGAAGACCCGAGGTCCAGTTCAAGTGGTACGTGGACGGCGTGAGGTGCATA
ATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTTCCGTGTGGTCAGCGTCCTCACCGTCCTGCACC
AGGACTGGCTGAACGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCATCGAGAAAACCA
TCTCCAAAACCAAGGACAGCCCGGAGAACCACAGGTGTACACCCTGCCCCATCCCGGAGGAGATGACCAAGA
ACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTACCCCAGCGACATCGCCGTGGAGTGGGAGAGCAGCGGGC
AGCCGGAGAACAACCTACAACACCACGCCTCCCATGCTGGACTCCGACGGCTCCTTCTTCTTACAGCAAGCTCA
CCGTGGACAAGAGCAGGTGGCAGCAGGGGAACATCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCGCT
TCACGCAGAAGAGCCTCTCCCTGTCTCCGGGTAAATGAGTGCGACGGCCGGCAAGCCCCGCTCCCCGGGCTCTC
GGGGTCGCGCGAGGATGCTTGGCACGTACCCCGTGTACATACTTCCCGGGCACCCAGCATGGAAATAAAGCACCC
AGCGCTGCCCTGGG

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FIGURE 4121

GACAGCCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCAGGTCAGCCTGA
CCTGCCTGGTCAAAGGCTTCTACCCAGCGACATCGCCGTGGAGTGGGAGAGCAGCGGGCAGCCGGAGAACAAC
ACAACACCACGCCTCCCATGCTGGACTCCGACGGCTCCTTCTTCTCTACAGCAAGCTCACCGTGGACAAGAGCA
GGTGGCAGCAGGGGAACATCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCGCTTCACGCAGAAGAGCC
TCTCCCTGTCTCCGGAGCTGCAACTGGAGGAGAGCTGTGCGGAGGCGCAGGACGGGGAGCTGGACGGGCTGTGGA
CGACCATCACCATCTTCATCACACTCTTCTGTTAAGCGTGTGCTACAGTGCCACCGTCACCTTCTTCAAGGTGA
AGTGGATCTTCTCCTCGGTGGTGGACCTGAAGCAGACCATCATCCCCGACTATAGGAACATGATTGGGCAGGGGG
CCTAGGGCCACCTCTGCGGGGTGTCCAGGGGCCACCCAGATCCACACACGAGCCGTGGGCCATGCTCAGCCACC
ACCCAGGCCACAACCTGCCCCGACCTCACCGCCCTCAACCCCATGGCTCTCTGTCTTTGCAGTCGCCCTCTGAGC
CCTGACACGCCCCCTTCCAGACCCTGTGCATAGCAGGTCTACCCAGACCTCCGCTGCTTGGTGCATGCAGGGA
GCTGGGGACCAGGTGTCCCCTCAGCAGGATGTCCCTGCCCTCCAGACCGCCAGATGCTCACACAAAAGGAGGCAG
TGACCAGCATCCGAGGCCCCCAGCCAGGAGCTGGCCCTGGAGCCAACCCGTCACGCCAGCCTCCTGAAC
ACAGGCGTGGTTTCCAGATGCCCCGAGCCAGCCAGCCTCCATTCCGGGCACTCCCGTGAACCTCCTGACATGAGGA
ATGAGGTTGTTCTGATTTCAAGCAAAGAACGCTGCTCTCTGGCTCCTGGGAACAGTCTCGGTGCCAGCACCACC
CTTGGCTGCCTGCCTACACTGCTGGATTCTCGGGTGGAACTGGACCCGCAGGGACAGCCAGCCCCAGAGTCCGCA
CTGGGGAGAGAAGGGGCCAG

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FIGURE 4122

AAGAAGAGGCGAGAAAGACCCCCGACAGACCAAAGCCCGTGTGCCGCTGCATCCTGCATCCAGCACCTACCTCC
CGCCACTGTGCGCCACTGCCACCATGCCCAAGAGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGGTGAA
GGATGAACCACAGAGAAGATCCGCAAGGTTGTCTGCTAAACCTCCTCCTCCAAAGCCAGACAGCCCAAGCCTAGA
AAGGCCCTGCAAAGAAGGGAGAGAAGGTACCCAAAGGGAAAAAGGGAAAAGCTGATGCCAGGAGGAGGGATTG
CCTGACTTTGACACACATGGCCACCTTGGCACAAAAGCCTTGTGGTATAGAAAAACAAATTTGTTTTATGTCCT
CTTCTCCCTTTCCATCTTTTTCAGCATAGACTTAACTCCCTTAAGCCAGACATCTGTTGGGACCTGACCCCTAGTC
ATTGGTTACCAGTGTGTGTCAGGCAATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAAGAGTAGTG
GTTCCATTTCTAGATTGTAGATCTTTCAGATAAATTCTGCCATTTTCATTTCACTTCCTGAAAGTCAGGGTCGGCT
TCTAAAAATTTGTTAAACAATATGCTAAATGTGAAATGTCACCCCTCACTCTAAACTTTCCCGTTCAGAGCATC
AGATGAAGACTTCATTGGGTTTTATAGTGGCTTTCTGATTTTTGGTAGTCCATTGAAGAAGGGAGTTTGAAAGTT
GTTGTATACTGTTAACGATTATCTGCCCATGTCCTGCCT

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FIGURE 4123

CTCTTTCCAGCCAGTGCCGAGCGATGGACATCTCTTGGGACAACCTGGCACAAAGTGCCACAAAACCAGGGACAAGA
GAAAGCCCTACCACAAGAAGCGGAAGTATGAGTTGGGGCACCCAGCTGCCAACACCAAGACTGGCCCCCGCCGCA
TCCACACAGTCCGTGTGTGGGGAGGTAACAAGAAATACTGTGCCCTGAGGCTGGACGTGAGGAATTTCTCCTGGG
GCTCAGAATGTTGTGCTCATAAAACAACGATCATCGATGTTGTCTACAATGCATCTAATAACGAGCTGGTTCGTC
CCAAGACCCCTGGTGAAGAATTGCATTGTGCTCATTGACAGCACACTGTACCGACAGTGGTACGAGTCCCCTATG
CGCCGCCCTGGGCTGCAAGAAGGGAGCCAAGCTGACTCCTGAGGAAGAAGAGATTTTGAACAAAAGCGATCTA
AAAAAATTCAGAAGAAATATCATGAAAGGAAAAAGAATGCCAAATCAGCAGTCTCCTGGGGGAGCAGTTCCAGC
AGGGCAAGCTTCTTGCAATGCATTGCTTCAAGGCCAGGACAGTGTGGCTGAGCAGATGGGTATGTGCTAGAGGGCA
AAGAGTTGGAGTTCTATCTTAGGAAAAATCAAGGCCCGGAAGGGCAAATAAATCCTTGTTTTGTCTTCACCCATGT
AATAAAGGTGTTTATTGTTTTGTTCC

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FIGURE 4124

ATGGATGAGGGAACCCAGCTTCAGAACAGTTTTAGATAAAGCTGTGCAAGCAGATGGACACGTGAAAGAATGTTAC
CCGTCTCATCGTGACCCCATCGTGCTTTTGTGTAAGCCAGAGCCTGAGCTGAATGCTGCCATCCCTTCTGCTAAT
CCAGCAAAGACCATGCAGGGCAGTGAGGTTGTAAATGTCTTAAATCCTTATTGTCAAATCTTGATGAAGTAAAG
AAGGAAAGAGAGGGTCTGGAGAATGACTTGAAATCTGTGAATTTTGACATGACAAGCAAGTTTTTGACAGCCCTG
GCTCAAGATGGTGTGATAAATGAAGAAGCTCTTTCTGTACTGAACTAGATCGAGTCTATGGAGGTCTTACAAC
AAAGTCCAAGAATCTCTAAAGACACAGGAGGGACTTCTTAAAAATATTCAGGTCTCACATCAGGAATTTTCGAAA
ATGAAGCAATCTAATAATGAAGCTAACTTAAGAAAAGAAGTTTTGAAGAATTTAGCTACTGCATATGACAACCTT
GTTGAACCTGTAGCTAATTCGAAGGAAGACACAAAGTTTTACAATGAGTTGACTGAAATCCTGGTCAGGTTCCAG
AACAAATGCAGCGATATAGTTTTGGCATGGAAGACAGAAAGAGATGAACCTTAAAGAGTAGGATGGATTATATT
ATTTGTGCAAAATGCCTTTGCATCTAACAAGAACCTCTTGGGTTTCATCCTTTGGAGAACCTGATATCATGGAAAAT
GGACTGAACTAG

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FIGURE 4125A

CCCAGGATGGCGGCCAGGTGACTCTGGAGGACGCGCTGTCCAACGTGGACCTCCTGGAGGAGCTGCCCCCTGCCC
GACCAGCAGCCCTGCATCGAGCCCCGCCATCCTCGCTGCTCTACCAGCCAAATTTCAACACTAATTTGAAGAC
AGAAATGCATTTGTTACTGGCATCGCAAGATACATTGAACAAGCCACCGTCCACTCTAGCATGAACGAGATGCTG
GAGGAGGGCCAAGAATATGCTGTCTGTACACCTGGAGGAGCTGCTCCCGGGCCATCCACAGGTGAAATGT
AACGAGCAGCCTAACAGAGTGGAAATCTACGAGAAAACCGTGGAGGTTCTGGAGCCTGAGGTACAAAACTGATG
AATTTCAITGACTTCCAGAGAAATGCCATTGAGCGTTTCTGCGGGGAAGTGAGGCGCCTGTGCCATGCCGAGAGG
AGGAAGGACTTCGTGTCAGAAGCCTACCTGATCACACTGGGCAAATTCATCAACATGTTTCGCTGTGCTGGACGAG
CTGAAGAACATGAAGTGCAGTGTGAAGAACGACCACTCAGCGTACAAGAGGGCCGCTCAGTTTTTACGTAAATG
GCAGATCCACAGTCCATCCAGGAATCGCAGAATCTGTCCATGTTTCTGGCCAATCATAACAAGATCACACAGTCT
CTGCAGCAGCAGCTCGAAGTGATTTCTGGCTACGAAGAGCTCCTGGCAGATATTGTGAATCTGTGTGTGGATTAC
TACGAGAACAGGATGTATTTGACGCCCAGTGAGAAACACATGCTTCTCAAAGTCATGGGATTTGGTCTGTACCTG
ATGGATGGGAGTGTCAGTAACATCTATAAGTTGGATGCCAAGAAAAGAATAAACTTATCCAAAATCGACAAGTAC
TTCAAGCAACTCCAGGTGGTTCCGCTATTTGGGGACATGCAAAATAGAAGTGGCAAGATATATCAAGACCAGCGCC
CACTACGAGGAAAAATAAATCTCGATGGACGTGCACATCCTCCGGCAGCAGCCCTCAGTACAACATCTGCGAGCAG
ATGATCCAGATCCGCGAGGACCACATGCGCTTCATTTGAGAGCTGGCGCGCTACAGCAACAGCGAGGTGGTCACG
GGCTCGGGCCGCCAGGAGGCCAGAGACGCGAGTACCGCAAGCTCTTCGACCTGGCGCTGCAGGGCCCTG
CAGCTGTTGTGCGAGTGAGCGCGCACGTGATGGAAGTGATTCCTGGAAGCTTGTGCACCCACCCGACAAGTAC
TCCAACAAGGACTGCCCCGACAGCGCTGAAGAGTACGAGCGTGCCACGCGCTACAACACTACAGCAGGAGGAAG
TTTGCCCTAGTGGAGGTGATCGCCATGATCAAGGCCTGCAGGIGCTGATGGGCAGGATGGAGAGCGTGTCAAC
CACGCCATCCGGCACACCGTCTATGCCGCACTGCAGGACTTCTCCAGGTGACCCTTAGGGAGCCGCTGCGCGAG
GCCATCAAGAAGAAGAAGAACGTATCCAGAGTGTCTGCAGGCCATCAGGAAGACCGTGTGTGACTGGGAGACG
GGGCATGAGCCCTTCAATGACCCAGCCTTGCGGGGCGAGAAGGACCCCAAGAGCGGCTTCGACATAAAAGTACCA
CGCCGCGCCGTGGGACCCTCCAGCACTCAGCTTTACATGGTGAGAACCATGCTAGAGTCCCTCATTGCAGACAA
AGTGGTTCCAAGAAAACCTTGAGAAGTAGCCTTGAGGGGCCACCATATTGGACATAGAAAAATTTTCATCGAGAG
TCATTCTTCTACACTCACTTGATAAATTTAGTGAAACGCTGCAGCAGTGCTGTGACCTTTTCGAGCTGTGGTTC
CGAGAGTTCTTCTGGAGCTGACCATGGGCAGGAGGATCCAGTTCCCCATTGAGATGTCGATGCCCTGGATCCTG
ACGGACCACATCCTGGAGACCAAGGAGGCATCGATGATGGAGTACGTGCTCTACTCCCTGGACCTGTACAATGAC
AGCGCCCACTACGCGCTCACCAGGTTCAACAAGCAGTTCTGTACGACGAAATTGAGGCCGAGGTGAATCTATGT
TTTGACCAATTTGTTTACAAGCTAGCAGACCAGATATTGGCTATTATAAGGTTATGGCAGGAAGTTTGCTTCTT
GATAAACGGTTACGATCAGAATGCAAGAATCAGGGAGCCACGATCCACCTCCCGCCGTCTAACCGCTACGAGACG
CTGCTGAAGCAGAGGCATGTGCAGCTCCTCGGCAGATCAATAGACCTCAATCGTCTGATCACCCAGCGCTCTCA
GCAGCCATGTATAAGTCCCTAGAACTGGCGATTGGACGATTTGAAAGTGAAGATTTGACCTCCATAGTTGAGCTG
GATGGCCTGTTGGAATCAACCGCATGACCCACAAGCTGCTGAGCCGGTACCTGACGCTGGACGGCTTCGACGCC
ATGTTCCGGGAGGCCAACCAACGTGTACGCGCCTACGGGAGGATCACCTGCACGTCTTCTGGGAGCTCAAC
TATGACTTCCTGCCAACTACTGCTACAACGGCTCTACCAACCGGTTTGTTCGGACAGTGTTACCATTTTCTCAG
GAATTTCAAAGAGATAAGCAGCCTAATGCACAGCCTCAGTATCTGCATGGATCCAAGGCTTTGAACTTGGCCTAC
TCCAGCATTTACGGCAGCTACCGGAATTCGTGGGACCTCCACACTTTCAAGTCATCTGCCGGCTTCTCGGCTAC
CAGGGTATCGCCGTGGTCATGGAGGAGCTGCTGAAGGTGCTCAAGAGCCTGCTGCAAGGCACAATCCTGCAGTAC
GTGAAGACGCTGATGGAGGTGATGCCAAGATCTGCCGCTGCCCGGCACGAGTACGGCTCTCCTGGTATCCTG
GAGTTCTTCCACCACCAGCTGAAGGACATCGTGGAGTACGAGAGXCTGAAGACGGTGTGCTTCCAGAACCTGCG
GGAGGTGGGGAACGCCATCCTTCTGCTGCTCATCGAGCAGAGCCTGTCTTTAGAAGAAGTGTGTGACCTGCT
GCACGCGGCTCCTTTCCAGAACATCTTGCCGCGAGTCCATGTGAAAGAGGGGGAGAGACTTGATGCCAAAATGAA
AAGACTAGAATCAAAGTACGCCCCGCTGCATCTTGTCCCACTGATTGAAAGACTGGGGACCCCTCAGCAAATTGC
CATCGCAAGAGAGGGGGACCTGCTGACAAAGGAGCGCCTCTGCTGCGGCCTGTCCATGTTTGGAGTCACTCTGAC
ACGGATCCGGAGCTTTCTGGATGACCCCATCTGGCGCGGGCCTCTGCCAGCAATGGGGTCATGCATGTGGACGA
GTGTGTGGAGTTTACAGACTGTGGAGTGCCATGCAGTTTGTCTACTGCATTCCCGTGGGGACACACGAGTTTAC
AGTCGAGCAGTGCTTTGGTGATGGGCTACACTGGGCTGGCTGTATGATCATCGTACTTCTTGGGCAGCAGCGCG
TTTTGCTGTGCTGGATTTCTGCTACCATCTACTTAAAGTCCAGAAACATGATGGCAAAGATGAGATTATTAATAA

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FIGURE 4125B

TGTGCCCTTTGAAGAAGATGGTGGAGAGAATTCGCAAGTTCAGATTCTCAATGATGAGATCATCACCATCCTGGA
TAAGTACCTGAAGTCAGGCGACGGGGAGGGCACGCCAGTGGAGCATGTGCGCTGCTTCCAGCCGCCCATCCACCA
GTCCCTCGCCAGCAGCTGAGGGCACGCGCTGCACTCCGTAACATGGCATGCCTTTCTCTCCGTAAACTAT
TTAGTGAGATTTTTAGGGACTATTTTTCAGTATCTCTGTACCTGTTAAAGGGGGTGCTTTTCGATCTAAAACTT
AATTTTATAAAATTGACTTATTTTTCTAGACTAAAATTGTATATGCTTTTGGTAATTAGGAACTCTTGAGAATAT
TGGCTGCTGATTGTTGCCATCACGTTCTACAAAATTGTTTTCTATGGGATGTTCTGGCAGCTGTGTCATAAAA
TGCTGCTGGGTTCAATTCATTCCATAAGAACTTAATACCAGCAAATGCATTAAATCCCTTGCCAGTTACCA
TTAACTGTAACTATTTAGCTTTTGTAGGGATCTTTCTGATGGTCTTTTATGAGCAATCTTAGTTCTAAGTCAT
TGTTCCTATCCCTTTTTTGTGTGTTTCAGAAAATAGTGAAGTTGATTCCCCTGCTTCCACTAAATCCAGTTGTGA
CAAAATCTAACGTGACATCAGATCGAAAGTTATAGAAATAAACTAATGAGATCT

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FIGURE 4126

MQIELARYIKTSAHYEENKSRWICTTSSGSSPQYNICEQMIQIREDHMRFI SELARYSNSEVVTGSGRQEAQKTD
EYRKLFDLALQGLQLLSQWSAHVMEVYSWKL VHPTDKYSNKDCPD SAEYERATRYNYTSEEKFALVEVIAMIKG
LQVLMGRMESVFNHAI RHTVYAALQDFSQVTLREPLRQAIKKKKNV IQSVLQAIKRTVCDWETGHEPFNDPALRG
EKDPKSGFDIKVPRRAVGPSSTQLYMVRTMLES LIADKSGSKKTLRSSLEGPTILDIEKFHRESFFYTHLINFSE
TLQQCCDLSQLWFRFFLELTMGRRIQFPIEMSMPWILTDHILETKEASMM EYVLYSLDLYNDSAHYALTRFNKQ
FLYDEIEAEVNLCFDQFVYKLADQIFAYYKVMAGSLLLDKRLRSECKNQGATIHLPPSNRYETLLKQRHVQLLGR
SIDLNRLITQRVSAAMYKSLELAIGRFESEDLT SIVELDGLLEINRMTHKLLSRYLTLDGFDAMFREANHNVSAP
YGRITLHVFWELNYDFLPNYCYNGSTNR FVRTVLFFSQEFQORDKQPNAQPQYLHGSKALNLAYSSIYGSYRNFVG
PPHFQVICRLLGYQGI AVVMEELLKVVK SLLQGTILQYVKTLMEVMPKICRLPRHEYGSPGILEFFHHQLKDIVE
YAEKTVCFQNLREVGNAILFCLLIEQSLSLEEVC DLLHAAPFQNILPRVHVKEGERLDAKMKRLESKYAPLHLV
PLIERLGTPQQIAIAREGDLLTKERLCCGLSMFEVILTRIRSFLDDPIWRGPLPSNGVMHVDECVEFHRLWSAMQ
FVYCIPVGTHEFTVEQC FGDGLHWAGCMIIVLLGQORRFAVLDFCYHLLKVQKHDGKDEI IKNVPLKKMVERIRK
FQILNDEIITILDKYLKSGDGEGTPVEHVRCFQPPIHQSLASS

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FIGURE 4127

GATCTGTTTGAGGAGATGGTGCCTGTGTCACTGTGGCAGTCTTTGGCTGCCTGTGATCAGAGGAAAGCCGATTG
TTAACAGATCAATTGCTCAGATGAGAGAAGCCACCACTTTGGCAAATGGAGTGCTAGCTTCCCTTAATCTTCCAG
CAGCAATTGAAGATGTGTCTGGAGACACTGTACCTCAGTCTATATTGACTAAATCAAGATCTGTGATTGAACAGG
GAGGCATCCAGACTGTTGATCAGTTGACTAAAGAAGTGCCTGAATTACTGCAATGAAATAGAGAAATCCTAGATG
AGTCATTAAGGTTTTTGGATGAAGAAGAAGCAACCGATAATGATTTATGAGCAAAATTTAAGGAACGCTGGCAA
GGACATCATCCAATGAACTGTATAAGCCTTTAAAAGCAGAGGGAACCAAGCTTCAGAACAGTTTTAGATAAAGCTG
TGCAAGCAGATGGACACGTGAAAGAATGTTACCCGTCTCATCGTGACCCCATCGTGCTTTTGTGTAAGCCAGAGC
CTGAGCTGAATGCTGCCATCCCTTCTGCTAATCCAGCAAAGACCATGCAGGGCAGTGAGGTTGTAAATGTCTTAA
AATCCTTATTGTCAAATCTTGATGAAGTAAAGAAGGAAAGAGAGGGTCTGGAGAATGACTTGAAATCTGTGAATT
TTGACATGACAAGCAAGTTTTTGGACAGCCCTGGCTCAAGATGGCATGATAAATGAAGAAGCTCTTCTGTACTG
AACTAGATCGAGTCTATGGAGGTCTTACAACCTAAAGTCCAAGAATCTCTAAAGAAACAGGAGGGACTTCTTAAAA
ATATTCAGGTCTCACATCAGGAATTTTCGAAAATGAAGCAATCTAATAATGAAGCTAACTTAAGAGAAGAAGTTT
TGAAGAATTTAGCTACTGCATGTGACAACTTTGTTGAAGTTGTAGCTAATTCGAAGGAAGGCACAAAGTTTTACA
ATGAGTTGACTGAAATCCTGGTCAGGTTCCAGAACAAATGCAGCGATATAGTTTTTGGCATGGAAGACAGAAAGAG
ATGAACTCTTAAAGGCCTGAGACCTGGGAGGAAGCTGGAGAAAAGATGCCCTCTGAATCTTTGTGTTTGGCTGCC
CAGGCTCGCCTTGACACC

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FIGURE 4128

MQGSEVVNLKSLLSNLDEVKKEREGLNDLKSVMFDMTSKFLTALAQDGMINEEALSVTELDREVYGGGLTTKVQE
SLKKQEGLLKNIQVSHQEF SKMKQSNNEANLREEVLKNLATACDNFVELVANSKEGTKFYNELTEILVRFQNKCS
DIVLAWKTERDELLKA

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FIGURE 4129

CCCCAGTGTGAACGATCCCGGGAACATGTCCTTTGTGAAGGAGACGGTGGACAAGCTGTTGAAAGGCTACGACA
TTCGCCTAAGACCCGACTTCGGGGGTCCCCCGGTCTGCGTGGGGATGAACATCGACATCGCCAGCATCGACATGG
TTTCCGAAGTCAACATGGATTATACCTTAACCATGTATTTTCAACAATATTGGAGAGATAAAAGGCTCGCCTATT
CTGGGATCCCTCTCAACCTCACGCTTGACAATCGAGTGGCTGACCAGCTATGGGTGCCCCGACACATATTTCTTAA
ATGACAAAAAGTCATTTGTGCAATGGAGTGACAGTGAAAAACCGCATGATCCGTCTTCACCCTGATGGGACAGTGC
TGTATGGGCTCAGAATCACCACGACAGCAGCATGCATGATGGACCTCAGGAGATACCCCTGGACGAGCAGAACT
GCACTCTGGAATTTGAAAGCTATGGCTACACCACGGATGACATTGAGTTTTACTGGCGAGGCGGGGACAAGGCTG
TTACCGGAGTGGAAAGGATTGAGCTCCCGCAGTTCTCCATCGTGGAGCACCGTCTGGTCTCGAGGAATGTTGTCT
TCGCCACAGGTGCCTATCCTCGACTGTCAGTCTTCGGTTGAAGAGGAACATTGGATACTTCATTCTTCAGA
CTTATATGCCCTCTATACTGATAACGATTCTGTCTGGTGGTGTCTTCTGGATCAATTATGATGCATCTGCTGCTA
GAGTTGCCCTCGGGATCACAACTGTGCTGACAATGACAACCATCAACACCCACCTTCGGGAGACCTTGCCCAAAA
TCCCCATGTCAAAGCCATTGACATGTACCTTATGGGCTGCTTCGTCTTTGTGTTTCTGGCCCTTCTGGAGTATG
CCTTTGTCAACTACATTTTCTTTGGAAGAGGCCCTCAAAGGCAGAAAGCTTGCAGAAAAGACAGCCAAGGCAA
AGAATGACCGTTCAAAGAGCGAAAGCAACCGGGTGGATGCTCATGGAAATATTCTGTTGACATCGCTGGAAGTTC
ACAATGAAATGAATGAGGTCTCAGGCGGCATTGGCGATAACAGGAATTCAGCAATATCCTTTGACAACTCAGGAA
TCCAGTACAGGAAACAGAGCATGCCTCGAGAAGGGCATGGGCGATTCTGGGGGACAGAAGCCTCCCGCACAAGA
AGACCCATCTACGGAGGAGGTCTTCACAGCTCAAAATTAATAACCTGATCTAACCGATGTGAATGCCATAGACA
GATGGTCCAGGATCGTGTTCATTCACTTTTTCTCTTTCAACTTAGTTTACTGGCTGTACTATGTAACTGAG
TGACTGTACTTGATTTTCAAAGACTTCATTTAACTGAGTGAAATATTACTCTGCCTGTCAAGTTTTTATACC
TGTACACACACAGACACACAAGCAGACACACACATATATACATACGCAATTGTATATATATGTGAACCTTTCTCAG
CATATATAT

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FIGURE 4130

GAGCAGTGTGAAGAAGAGGGCGAGAACGACCCCCGGACCGACCAAAGCCCCGCGTCGCCACCGCCACCATGCCCAAG
AGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGGTGAAGGACGAACCACAGAGAAGATCCGCGAGGTTG
TCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCCAAGCCTAAAAAGGCCCTGCAAAGAAGGGAGAGAAGGTACCC
AAAGGGAAAAAGGGAAAAGCTGATGCTGGCAAGGAGGGGAATAACCCCTGCAGAAAATGGAGATGCCAAAACAGAC
CAGGCACAGAAAGCTGAAGGTGCTGGAGATGCCAAGTGAAGTGTGTGCATTTTGATAACTGTGTATTCTGGTG
ACTGTACAGTTTGAAATACTTTTATCAAGTTTTATAAAAAATGCAGAATTTTGTTTTACTTTTTTTTTTTTTTTT
TAAGCTATGTTGTTTCGCACACAGAACACTTCATTGTTGTTTTGGGGGAAGGGGCATATGTCACATAATAGAATGT
CTCCAAAACCTGGATTGATGTGGAGAAAACACCTTCCCTTCCAGTTTGGAGAGACTTCCTCTTGGCTCCCAGGAG
GAGGGATTCCCTTGACTTTGACACACATGGCCACCTTGGCACAAAAGCCTTGTGCTATGGAAAACTCCCTTAAGC
CCAGACATCTGTTGAGACCTGACCCCTAGTCATTGGTTACCAGTGTGTCAGGCAATCTGGACTTT

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FIGURE 4131

MPKRKAEGDTKRDKAKVKDEPQRRSVRLSAKPAPPKPEPKPKKAPAKKGEKVPKGKKGKADAGEEGNNPAENGVA
KTDQAQKAESPGDAK

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FIGURE 4132

GGCGAGAACGACCCCCGGACCGACCAAAGCCCCGCGTGCCGCTGCATCCCACGTCCAGCACCTACGTCCTGTCGCC
ACCGCCACCATGCCCAAGAGAAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGGTGAAGGACGAACCACAG
AGAAGATCCGCGAGGTTGTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCAAGCCTAAAAAGGCCCTGCAAAG
AAGGGAGAGAAGGTACCCAAAGGGAAAAAGGGAAAAAGCTGATGCCCAGGAGGAGGGATTCTTGACTTTGACACA
CATGGCCACCTTGGCACAAAAGCCTTGTGCTATGGAAAAACAAATTTGTTTTATGTCCTCTTCTCCCTTTCCAC
GTTTCAGCATAGACTTAACTCCCTTAAGCCCAGACATCTGTTGAGACCTGACCCCTAGTCATTGGTTACCAGTGT
GTCAGGCAATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAAGAGCAGTGGTTCCATTTCTAGAT
TGTGGATCTTCAGATAAATTCTGCCATTTTCGTTTCACTTCTGAAAGTCAGGGTTGGCTTGTGAAAAGTTGTTA
AACAACATGCTAAATGTGAAATGTCAACCCCTCACTCTCAACTTTCCCTGTTTCAGAGCATCAGATGAAGACTTCAT
TGGGTTTTATAGTGGCTTTCTGATTTTTGGTAGTCCATTGAAGAAGGGAGTTTGAAAGTTGTTGTATACTGTTAA
CGATTGCTGCCCATGTCCTGCCTGAAATACCA

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FIGURE 4133

TTACTACTGATGTGAACAGATTCTGACCTTTGGCTGCCTAGTTGTTTTTGATAAATTAACCTCTTAGAATAATGAT
GAATGTCTTGGCCGTTTCCTCAAAAACCTTTGGCTGTTTGACAGCAGATGATGGATGTCTAGAAAACACCCCTGACA
CTGCAGAGTTTCAGTCGAGAGTTCCAGTTGCACCAGCATCTCTTTGATCCGGAACATGACTATCCAGGCTTGGGCA
AGTGGAAACAAGAACTCCTTTACGAGAAGATGAAGGGAGGAGAGAGACGAAAGCGGAGGAGTGTCAATCCATATC
TACAAGGACAGAGACTGGATAATGTTGTTGCAAAGAAGTCTGTCCCCCATTTTTCAGATGAGGATAAGGATCCAG
AGTAAAGAGAAGATGCTAGACGAAAACCCACATTACCTGTTAGGCCTCAGCATGGCTTATGTGCACGTGTAAATG
GAGTCCCTGTGAATGACAGCATGTTTCTTACATAGATAATTATGGATACAAAGCAGCTGTATGTAGATAGTGTAT
TGTCTTCACACCGATGATTCTGCTTTTTTGCTAAATTAGAATAAGAGCTTTTTTGTCTTGGGTTTTTAAATGT
GAATCTGCAATGATCATAAAAAATTAAATGTGAATGTCAACAATAAAAAGCAAGACTATGAAAGGCTCAGATTTT
TTGCAGTTTTAAATGGTGTCTGAGGTTGTACTATTTGGCCAAGTCTGTAGAAAGCTGTCAATTTGATTTTGATTA
TGTAAGTTTCATCCAGCCCTTGGGCATTGTTATACACCAGTAAAGAAGGCTGTACTCAAGAGGAGGAGCTGACACAT
TTCACCTGGCTGCGTCTTAATAAACATGAATGCAAGCATTGG

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FIGURE 4134A

CGGCGCGCACTCAGCGCCACGCGTGCAGAAAGCGCAGGCCCGGAGGACC CGCCGCACTGACAGTATGAGCCGCACAG
CCTACACGGTGGGAGCCCTGCTTCTCCTCTTGGGGACCCTGCTGCCGGCTGCTGAAGGGAAGAAAGGGTCCC
AAGGTGCCATCCCCCGCCAGACAAGGCCCAGCACAAATGACTCAGAGCAGACTCAGTCGCCCCAGCAGCCTGGCT
CCAGGAACCGGGGGCGGGGCCAAGGGCGGGGCACTGCCATGCCCGGGGAGGAGGTGCTGGAGTCCAGCCAAGAGG
CCCTGCATGTGACGGAGCGCAAATACCTGAAGCGAGACTGGTGCAAAACCCAGCCGCTTAAGCAGACCATCCACG
AGGAAGGCTGCAACAGTCGCACCATCATCAACCGCTTCTGTTACGGCCAGTGCAACTCTTTCTACATCCCAGGC
ACATCCGGAAGGAGGAAGGTTCTTTTTCAGTCCTGCTCCTTCTGCAAGCCCAAGAAATTCCTACCATGATGGTCA
CACTCAACTGCCCTGAACCTACAGCCACCTACCAAGAAGAAGAGAGTACACAGTGTGAAGCAGTGTCTGTTGCATAT
CCATCGATTTGGATTAAAGCCAAATCCAGGTGCACCCAGCATGTCTTAGGAATGCAGCCCCAGGAAGTCCCAGAC
TAAACAACCCAGATTCTTACTTGGCTTAAACCTAGAGGCCAGAAGAACCCCCAGCTGCCTCCTGGCAGGAGCCTG
CTTGTGCGTAGTTTCGTGTGCATGAGTGTGGATGGGTGCCTGTGGGTGTTTTTGTAGACACCAGAGAAAACACAGTCT
CTGCTAGAGAGCACTCCCTATTTTTGTAAACATATCTGCTTTAATGGGGATGTACCAGAAACCCACCTCACCCCGG
CTCACATCTAAAGGGGCGGGGCCGCTGGTCTGGTTCTGACTTTGTGTTTTTGTGCCCTCCTGGGGACCAGAATCTC
CTTTCGGAATGAATGTTTCATGGAAGAGGCTCCTCTGAGGGCAAGAGACCTGTTTTAGTGTGCATTTCGACATGGA
AAAGTCCTTTTAACTGTGCTTGCATCCTCCTTTCTCCTCCTCCTCACAATCCATCTCTTCTTAAGTTGATAGT
GACTATGTGAGTCTAATCTCTTGTGTTTGCCAAGGTTCTTAAATTAATTCACTTAACCATGATGCAAATGTTTTTCA
TTTTGTGAAGACCTCCAGACTCTGGGAGAGGCTGGTGTGGGCAAGGACAAGCAGGATAGTGGAGTGAGAAAGGG
AGGGTGGAGGGTGAGGCCAAATCAGGTCCAGCAAAAGTCAGTAGGGACATTGCAGAAGCTTGAAGGCCAATACC
AGAACACAGGCTGATGCTTCTGAGAAAGTCTTTTCTTAGTATTTAACAGAACCCCAAGTGAACAGAGGAGAAAATGA
GATTGCCAGAAAGTGATTAATCTTTGGCCGTGCAATCTGCTCAAACTTAACACCAAACTGAAAACATAAAATACTG
ACCATCCATGTTGTCGGAGCCAAGCAAGTTAGCTAAACCAAACTTCTGCTTTGTCCCTCAGGTGGGAAA
GAGAGGTAGTTTGAAGTCTCTGCATAGGGGTGGGAATTAATCAAAACCTCAGAGGCTGAAATTCCTAATACCT
TTCCTTTATCGTGGTTATAGTCAGCTCATTTCCTATTCACATTTTCCCATATGCTTCTGAGAGCCACTAAGTGG
ATTGATAAAGATCCTGCCTCTGCTGAGTGTACCTGACAGTAGTCTAAGATGAGAGAGTTTAGGGACTACTCTGTT
TTAGCAAGAGATATTTTTGGGGGTCTTTTTGTTTTTAACTATTGTGAGGAGATTGGGCTAAAGAGAAAGACGACGAGA
GTAAGGAAATAAAGGGAATTGCCTCTGGCTAGAGAGTAGTTAGGTGTTAATACCTGGTAGAGATGTAAGGGATAT
GACCTCCCTTTCTTTATGTGCTCACTGAGGATCTGAGGGGACCCTGTTAGGAGAGCATAGCATCATGATGTATTA
GCTGTTTCACTGCTACTGGTTGGATGGACATAACTATTGTAACATTTAGTATTTACTGGTAGGCACTGTCTCTCT
GATTAAACTTGGCCTACTGGCAATGGCTACTTAGGATTGATCTAAGGGCCAAAGTGCAGGGTGGGTGAACCTTAT
TGTACTTTGGATTGGTTAACCTGTTTTCTTCAAGCCTGAGGTTTTATATACAACTCCCTGAATACTCTTTTTG
CCTTGTATCTTCTCAGCCTCCTAGCCAAGTCTTATGTAATATGGAAAACAAACTGCAGACTTGAGATTAGTT
GCCGATCAAGGCTCTGGCATTAGAGAACCTTGCAACTCGAGAAGCTGTTTTTATTTCTGTTTTGTGTTTTGATCC
AGTGCTCTCCCATCTAACAACTAAACAGGAGCCATTTCAAGGCGGGAGATATTTTAAACACCCAAAATGTTGGGT
CTGATTTTCAAACCTTTTAAACTCACTACTGATGATTCTCACGCTAGGCGAATTTGTCCAAACACATAGTGTGTGT
GTTTTGTATACACTGTATGACCCACCCCAAATCTTTGTATTGTCCACATTCTCCAACAATAAAGCACAGAGTGG
ATTTAATTAAGCACACAAATGCTAAGGCAGAATTTTGAGGGTGGGAGAGAAGAAAAGGGAAAGAAGCTGAAAATG
TAAACCACACCAGGGAGGAAAAATGACATTGAGAACCAGCAAACTGAATTTCTCTTGTGTGTTTTAACTCTGC
CACAAGAAATGCAATTTCTGTTAACGGAGATGACTTAAGTTGGCAGCAGTAATCTTCTTTTAGGAGCTTGTACCACA
GTCTTGCACATAAGTGCAGATTTGGCTCAAGTAAAGAGAATTTCTTCAACACTAAGTTCACTGGGATAATCAGCA
GCGTAACCTACCTAAAAGCATATCACTAGCCAAAGAGGGGAAATATCTGTTCTTCTTACTGTGCCTATATTAAGAC
TAGTACAAATGTGGTGTGTCTTCCAACCTTCATTGAAAATGCCATATCTATACCATATTTTATTCGAGTCACCTGA
TGATGTAATGATATATTTTTTCAATTATATAGTAGAATATTTTTATGGCAAGATATTTGTGGTCTTGATCATACC
TATTAATAATGCCAAACACCAAATATGAATTTTATGATGTACACTTTGTGCTTGGCATTAAAGAAAAAACA
CACATCCTGGAAGTCTGTAAGTTGTTTTTTGTTACTGTAGGTCTTCAAAGTTAAGAGTGTAGTGAATAATCTGG
AGGAGAGGATAAATTCCTACTGTGTGGAATGTGAATAGTTAAATGAAAAGTTATGGTTATTTAATGTAATTATTAC
TTCAAATCCTTTGGTCACTGTGATTTCAAGCATGTTTTCTTTTTCTCCTTTATAGCTATGCTTCTCTGAGTTGGGCA
AAGAAGAAGCTGCACACCCGTATGTTGTTAGAGTCTTTTATCTGCTGAGGGGAAACAAAATCTTGACCCAGCTGA
ACATGTCTTCTGAGTCACTGCCTGAATCTTTATTTTTTAAATGTAATGTTCTTAAAGGTTAACATTTCTAAAG

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FIGURE 4134B

CAATATTAAGAAAGACTTTAAATGTTATTTTGGGAAGACTTACGATGCATGTATACAAACGAATAGCAGATAATGA
TGACTAGTTCACACATAAAGTCCTTTTAAGGAGAAAATCTAAAATGAAAAGTGGATAAACAGAACATTTATAAGT
GATCAGTTAATGCCTAAGAGTGAAAGTAGTTCTATTGACATTCCCTCAAGATATTTAATATCAACTGCATTATGTA
TTATGTCTGCTTAAATCATTAAAAACGGCAAAGAATTATATAGACTATGAGGTACCTTGCTGTGTAGGAGGATG
AAAGGGGAGTTGATAGTCTCATAAACTAATTTGGCTTCAAGTTTCATGAATCTGTAACCTAGAATTTAATTTTCA
CCCCAATAATGTTCTATATAGCCTTTGCTAAAGAGCACTAATAAATTAAACCTATTCTTTC

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FIGURE 4135

CTTTCTGTGCCGATAACGCTCACGCAAGCATGGTTAACGTCCCTAAAACCCGCCGGACTTTCTGTAAGAAGTGTG
GCAAGCACCAACCCCATAAAGTGACACAGTACAAGAAGGGCAAGGATTCTCTGTATGCCAGGGAAAGCGGCGTT
ATGACAGGAAGCAGAGTGGCTATGGTGGGCAACTAAGCCAATTTTCTGGAAAAAGGCTAAACTACAAAGATTG
TGCTAAGGCTTGAGTGCATTGAGCCCAACTGCAGATCTAAGAGAATGCTGGCTATTAAAAGATGCAAGCATTG
AACTGGGAGGAGATAAGAAGAGAAAGGGCCAAGTGATTCAGTTCTAAGTGTCATCTTTTATTATGAAGACAATAA
AATCTTGAGTTTATGTTC

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FIGURE 4136

AGGAGGAGGAGGAAGATCAGGAGGAGGAGGAAGAAGAGGAAAAAAGAGAAAAAGAAGAAATATCACAGAAAAAA
AATTCTTCGTTGTCTAGACTGGGCTTTTTTCCCCCTAAAAAATAGCATATTGGAGAATTGGGAGAAGTCTCTT
TGGTTTGGAAAAAAGGAATCTTCAGCCTAGATCACTTTCTTATCCGGACTGGGATATTAAATATACGAC
ACATCCAGGAGTTTATTGGAGCGCAGACTGATGCGCAAAGGTACGATGAGCTGCCCCATTACGGCGGGATGGAC
GGAGTAGGGGTTCCCGCTTCCATGTACGGAGACCTCACGCGCCGCGGCCGATCCCCCGGTTACCCACCTGAAC
CACGGGCCGCGCTCCACGCCACACAGCACTACGGCGCGCACGCCCGCACCCCAATGTCATGCCGGCCAGTATG
GGATCCGCTGTCAACGACGCCCTTGAAGCGGGACAAGGACGCGATCTATGGGCACCCGTTGTTTCTCTGTAGCT
CTGGTCTTTGAGAAGTGCAGAGCTGGCGACCTGCACTCCCCGGGAACCTGGAGTGGCTGGCGGAGACGTCTGCTCC
TCCGACTCCTTCAACGAGGACATCGCGGTCTTCGCCAAGCAGGTTTCGCGCCGAAAAGCCACTTTTTTCTCTCAAT
CCAGAGCTGGACAATTGATGATACAAGCAATACAAGTACTAAGGTTTCATCTTTTGGAGTTAGAAAAGGTCCAC
GAACTGTGCGATAACTTCTGCCACCGATACATTAGCTGTTTGAAGGGGAAAAATGCCATCGACCTCGTCAATTGAT
GAAAGAGACGGCAGCTCCAAGTCAGATCATGAAGAACTTTCAGGCTCCTCCACAAAATCTCGCTGACCATAACCC
TCTTCTTGGCGAGACCACGATGATGCAACCTCAACCCACTCAGCAGGCACCCAGGGCCCTCCAGTGGGGGCCAT
GCTTCCCAGAGCGGAGACAACAGCAGTGAGCAAGGGGATGGTTTAGACAACAGTGATAGCTTACCTGGTACAGGT
GACGATGATGATCCGGATAAGGACAAAAACGCCAGAAGAAAAGAGGCATTTTCCCCAAAGTAGCAACAAATATC
ATGAGAGCATGGCTCTTCCAGCATCTCACAGTTTATTAATGCCAGAAGAAGAATAGTACAGCCCATGATTGACCA
GTCAAATCGAGCAGTGAGCCAAGGAGCAGCATATAGTCCAGAGGGTCAGCCCATGGGGAGCTTTGTGTTGGATGG
TCAGCAACACATGGGGATCCGGCTGCAGGACCTATGAGTGGAAATGGGCATGAATATGGGCATGGATGGGCAATG
GCACTACATGTAACCTTCATCATGTAAAGCAATCGCAAAGCAAGGGGGAAGTTTGCAGAGCATGCCAGGGGACTA
CGTTTCTCAGGGTGGTCCATGCGGAATGAGTATGGCACAGCCAAGTTACACTCCTCCCCAGATGACCCACACCC
TACTCAATTAAGACATGGACCCCCAATGCATTTCATATTTGCCAAGCCATCCCCACCACCCAGCCATGATGATGCA
CGGAGGACCCCTACCCACCTGGAATGACTATGTCAGCACAGAGCCCCACAATGTTAAATTCTGTAGATCCCAA
TGTGCGGACAGGTTATGGACATTCATGCCCAATAGTATAAGGGAACTCAAGGGAAAAGGAAACACACGCAAAA
ACTATTTTAAGACTTTCTGAACCTTGACCAGATGTTGACACTTAATATGAAATTCAGACAGCTGTGATTATTTT
TTACTTTTGTCAATTTTCATCAAGCAACAGAGGACCAATGCAACAAGAACACAAATGTGAAATCATGGGCTGACT
GAGACAATTCTGTCCATGTAAAGATCCTCTGGAAGAAAGACTCCGAGAGTTATACTACTGTAGTATAAATATAGG
AACTAAGTTAACTTGACATTTCTGTTGATCACGCCGTTATGTTGCCTCAAATAGTTTTAGAAGAGAAAAAAA
ATATATCCTTGTTCACACTATGTGTGTGTTCCCAAAGAATGACTGTTTTGGTTCATCAGTGAATTCACCA
TCCAGGAGAGACTGTGGTATATATTTAAACCTGTGGGCCAATGAGAAAAGAACCACTGGAGATCATGATGA
ACTTTTGGCTGAACCTCATCACTCGAACTCCAGCTTCAGAATGTGTTTTTCATGCCCGGCCCTTTGTTCTCCATAA
ATGTGTCCTTTAGTTTCAAACAGATCTTTATAGTTTCGTGCTTCATAAGCCAATTCCTATTATTATTTTGGGGGA
CTCTTCTTCAAAGAGCTTGCCAATGAAGATTTAAAGACAGAGCAGGAGCTTCTTCCAGGAGTTCTGAGCCTTGGT
TGTGGACAAAACAATCTTAAGTTGGGCAGCTTTCTCAACACAAAAAAGTTATTAATGGTCATTGAACCATAA
CTAGGACTTTATCAGAACTCAAAGCTTGGGGGATAAAAAGGAGCAAGAGAATACTGTAACAACTTCGTACAGA
GTTCCGTCTATTAATTGTTTCATGTTAGATATTCTATGTGTTTACCTCAATTGAAAAAAGAAATGTTTTTGC
TAGTATCAGATCTGCTGTGGAATTGGTATTGTAIGTCCATGAATTCCTTTCTCAGCACGTGTTCTCTACTAG
AAGAAAATGCTGTTACCTTTAAGCTTTGTCAAATTTACATTAAATACTTGTATGAGGACTGTGACGTTATGTT

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FIGURE 4137

MAQRYDELPHYGGMDGVGVPASMYGDPHAPRP IPPVHHLNHGPPLHATQHYGAHAPHNPVMPASMGSAVNDALKR
DKDAIYGHPLFP LLALVF EKCELATCTPREPGVAGGDVCSSDSFNEDI AVFAKQVRAEKPLFSSNP ELDNLM IQA
IQVLRFH LLELEKVHELCDNFCHRYISCLKGKMP IDLVIDERDGSSKSDHEELSGSSTNLADHNPSSWRDHDDAT
STHSAGTPGPSSGGHASQSGDNSSEQDGLDNSVASPGTGDDDDPDKDKKRQKKRGIFPKVATNIMRAWLFQHLT
VY

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FIGURE 4138A

GGACGCACAGGCATTCCCCGCGCCCCTCCAGCCCTCGCCGCCCTCGCCACCGCTCCCGGCCGCGCGCTCCGGTA
CACACAGGATCCCTGCTGGGCACCAACAGCTCCACCATGGGGCTGGCCTGGGGACTAGGCGTCTGTTCCTGATG
CATGTGTGTGGCACCAACCGCATTCCAGAGTCTGGCGGAGACAACAGCGTGTGTTGACATCTTTGAACTACCCGGG
GCGGCCCGCAAGGGGTCTGGGCGCCGACTGGTGAAGGGCCCCGACCCTTCCAGCCCAGCTTCCGCATCGAGGAT
GCCAACCTGATCCCCCTGTGCCTGATGACAAGTTCCAAGACCTGGTGGATGCTGTGCGGGCAGAAAAGGGTTTC
CTCCTTCTGGCATCCCTGAGGCAGATGAAGAAGACCCGGGGCAGCTGCTGGCCCTGGAGCGGAAAGACCACTCT
GGCCAGGTCTTCAGCGTGGTGTCCAATGGCAAGGCGGGCACCCTGGACCTCAGCCTGACCTCCAAGGAAAGCAG
CACGTGGTGTCTGTGGAAGAAGCTCTCCTGGCAAGCGGCCAGTGGAAAGAGCATCACCTGTTTGTGCAGGAAGAC
AGGGCCCGACTGTACATCGACTGTGAAAAGATGGAGAATGCTGAGTTGGACGTCCCCATCCAAAGCGTCTTCACC
AGAGACCTGGCCAGCATCGCCAGACTCCGCATCGCAAAGGGGGCGTCAATGACAATTTCCAGGGGTGCTGCAG
AATGTGAGGTTTGTCTTTGGAACCACACAGAAGACATCCTCAGGAACAAAGGCTGCTCCAGCTCTACCAGTGTCT
CTCCTCACCCCTTGACAACAACGTGGTGAATGTTTCCAGCCCTGCCATCCGCACTAACTACATTGGCCACAAGACA
AAGGACTTGCAAGCCATCTGCGGCATCTCCTGTGATGAGCTGTCCAGCATGGTCTTGGAATCAGGGGCTGCGC
ACCATTGTGACCACGCTGCAGGACAGCATCCGCAAAGTGACTGAAGAGAACAAGAGTTGGCCAATGAGCTGAGG
CGGCCTCCCCTATGCTATCACAACGGAGTTTCTGACAGAAATAACGAGGAATGGACTGTTGATAGCTGCACTGAG
TGTCAGTGTGCAAACTCAGTTACCATCTGCAAAAAGGTGTCTTCCCATCATGCCCTGCTCCAATGCCACAGTT
CCTGATGGAGAATGCTGTCTCGCTGTTGGCCAGCGACTCTGCGGACGATGGCTGGTCTCCATGGTCCGAGTGG
ACCTCCTGTTTCTACGAGCTGTGGCAATGGAATTCAGCAGCGCGGCCGCTCCTGCGATAGCCTCAACAACCGATGT
GAGGGCTCCTCGGTCCAGACACGGACCTGCCACATTACAGAGTGTGACAAGAGATTTAAACAGGATGGTGGCTGG
AGCCACTGGTCCCCGTGGTTCATCTTGTCTGTGACATGTGGTGTGATGATCACAAGGATCCGGCTCTGCAAC
TCTCCCAGCCCCCAGATGAACGGGAAACCCTGTGAAGGCGAAGCGCGGAGACCAAAGCCTGCAAGAAAGACGCC
TGCCCCATCAATGGAGGCTGGGGTCTTGGTCAACATGGGACATCTGTTCTGTACCTGTGGAGGAGGGGTACAG
AAACGTAGTCGTCTCTGCAACAACCCACACCCAGTTTGGAGGCAAGGACTGCGTTGGTGTGATGTAACAGAAAAC
CAGATCTGCAACAAGCAGGACTGTCCAATTGATGGATGCCTGTCCAATCCCTGCTTTGCCGGCGTGAAGTGTACT
AGTACCCTGATGGCAGCTGGAAATGTGGTGTCTGTCCCCCTGGTTACAGTGGAAATGGCATCCAGTGCACAGAT
GTTGATGAGTGCAAGAAGTGCTGATGCCTGCTTCAACCACAATGGAGAGCACCGGTGTGAGAACACGGACCCC
GGCTACAATGCCTGCCCTGCCCCCACGCTTACCGGCTCACAGCCCTTCGGCCAGGGTGTGCAACATGCCACG
GCCAACAAACAGGTGTGCAAGCCCCGTAAACCCTGCACGGATGGGACCCACGACTGCAACAAGAACGCCAAGTGC
AACTACCTGGGCCACTATAGCGACCCCATGTACCGCTGCGAGTGCAAGCCTGGCTACGCTGGCAATGGCATCATC
TGCGGGGAGGACACAGACCTGGATGGCTGGCCCAATGAGAACCCTGGTGTGCGTGGCCAATGCGACTTACCACTGC
AAAAAGGATAATTGCCCCAACCTTCCCAACTCAGGGCAGGAAGACTATGACAAGGATGGAATTGGTGTGCTGT
GATGATGACGATGACAATGATAAAATTCAGATGACAGGGACAACGTCCATTCCATTACAACCCAGCTCAGTAT
GACTATGACAGAGATGATGTGGGAGACCGCTGTGACAACGTCCCTACAACCACAACCCAGATCAGGCAGACACA
GACAACAATGGGAAGGAGACGCCTGTGCTGCAGACATTGATGGAGACGGTATCCTCAATGAACGGGACAACCTGC
CAGTACGTCTACAATGTGGACAGAGAGACACTGATATGGATGGGGTTGGAGATCAGTGTGACAATTGCCCTTG
GAACACAATCCGGATCAGCTGGACTCTGACTCAGACCGCATTGGAGATACCTGTGACAACAATCAGGATATTGAT
GAAGATGGCCACCAGAACAATCTGGACAACCTGTCCCTATGTGCCCAATGCCAACAGGCTGACCATGACAAAGAT
GGCAAGGGAGATGCCTGTGACCACGATGATGACAACGATGGCATTCTGATGACAAGGACAACCTGCAGACTCGTG
CCCAATCCCGACCAGAAGGACTCTGACGGCGATGGTCGAGGTGATGCCTGCAAAGATGATTTTGACCATGACAGT
GTGCCAGACATCGATGACATCTGTCTGAGAATGTTGACATCAGTGAGACCGATTTCCGCCGATTCCAGATGATT
CCTCTGGACCCCAAGGGACATCCCAAAATGACCCTAACTGGGTGTGACGCCATCAGGGTAAAGAACTCGTCCAG
ACTGTCAACTGTGATCCTGGACTCGCTGTAGGTTATGATGAGTTTAAATGCTGTGGACTTCAGTGGCACCTTCTTC
ATCAACACCGAAAGGGACGATGACTATGCTGGATTTGTCTTTGGCTACCACTCCAGCAGCCGCTTTTATGTTGTG
ATGTGGAAGCAAGTCACCCAGTCCCTACTGGGACACCAACCCACGAGGGCTCAGGGATACTCGGGCCTTTCTGTG
AAAGTTGTAAACTCCACCACAGGGCCTGGCGAGCACTGCGGAACGCCCTGTGGCACACAGGAAACACCCCTGGC
CAGGTGCGCACCCCTGTGGCATGACCCCTCGTCACATAGGCTGGAAAGATTTACCGCCTACAGATGGCGTCTCAGC
CACAGGCCAAAGACGGGTTTCATTAGAGTGGTGTATGTAAGGGAAGAAAATCATGGCTGACTCAGGACCCATC
TATGATAAAACCTATGCTGGTGGTAGACTAGGGTTGTTTGTCTTCTCTCAAGAAATGGTGTCTTCTCTGACCTG

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FIGURE 4138B

AAATACGAATGTAGAGATCCCTAATCATCAAATTGTTGATTGAAAGACTGATCATAAACCAATGCTGGTATTGCA
CCTTCTGGAACTATGGGCTTGAGAAAACCCCCAGGATCACTTCTCCTTGGCTTCCTTCTTTTCTGTGCTTGCATC
AGTGTGGACTCCTAGAACGTGCGACCTGCCCTCAAGAAAATGCAGTTTTCAAAAACAGACTCAGCATTACAGCCTCC
AATGAATAAGACATCTTCCAAGCATATAAACAATTGCTTTGGTTTTCTTTTGAAAAAGCATCTACTTGCTTCAGT
TGGGAAGGTGCCCATTCACCTCTGCCCTTGTACAGAGCAGGGTGCTATTGTGAGGCCATCTCTGAGCAGTGGAC
TCAAAAAGCATTTTCAGGCATGTACAGAGAAGGGAGGACTCACTAGAATTAGCAAACAAAACCACCTGCATCCTC
CTTCAGGAACACGGGGAGCAGAGGCCAAAGCACTAAGGGGAGGGCGCATACCCGAGACGATTGTATGAAGAAAAT
ATGGAGGAACGTGTACATGTTTCGGTACTAAGTCAATTTTCAGGGGATTGAAAGACTATTGCTGGATTTTCATGATGC
TGACTGGCGTTAGCTGATTAAACCCATGTAAATAGGCACTTAAATAGAAGCAGGAAAGGGAGACAAAGACTGGCTT
CTGGACTTCTCCTCGATCCCCACCTTACTCATCACCTGCAGTGGCCAGAATTAGGGAATCAGAATCAAACCAG
TGTAAGGCAGTGCTGGCTGCCATTGCCTGGTCACATTGAAATTGGTGGCTTCATTCTAGATGTAGCTTGTGCAGA
TGTAGCAGGAAAAATAGGAAAACCTACCATCTCAGTGAGCACCAGCTGCCTCCCAAAGGAGGGGCAGCCGTGCTTA
TATTTTTATGGTTACAATGGCACAAAATTATTATCAACCTAACTAAAAACATTCCTTTTTCTCTTTTTTCTGAATT
ATCATGGAGTTTTCTAATTCCTCTCTTTTGGAAITGATAGTTTTTTTTTAAATGCTTTACGATGTAAAAATATTTATTT
TTTACTTATTCGGAAGATCTGGCTGAAGGATTATTCATGGAACAGGAAGAAGCGTAAAGACTATCCATGTCATC
TTTGTGAGAGTCTTCGTGACTGTAAGATTGTAAATACAGATTATTTATTAACCTCTGTTCTGCCTGGAAATTTAG
GCTTCATACGGAAAGTGTGAGAGCAAGTAGTTGACATTATCAGCAAACTCTTGCAAGAACAGCACAAAGGAA
AATCAGTCTAATAAGCTGCTCTGCCCCCTGTGCTCAGAGTGGATGTTATGGGATTCTTTTTTCTCTGTTTTATC
TTTTCAAGTGGAAATTAGTTGGTTATCCATTGCAAAATGTTTTAAATTGCAAAGAAAGCCATGAGGTCTTCAATAC
TGTTTTACCCCATCCCTTGTGCATATTTCCAGGGAGAAGGAAAGCATATACACTTTTTTCTTTCATTTTTTCCAAA
AGAGAAAAAAATGACAAAAGGTGAACTTACATACAAATATTACCTCATTGTTGTGTGACTGAGTAAAGAATTT
TTGGATCAAGCGGAAAGAGTTTAAAGTGCTAACAACTTAAAGCTACTGTAGTACCTAAAAAGTCAGTGTGTGAC
ATAGCATAAAAACTCTGCAGAGAAGTAATCCCAATAAGGAAATAGCATTGAAATGTTAAATACAATTTCTGAAAG
TTATGTTTTTTTTCTATCATCTGGTATACCATTGCTTTATTTTTATAAATTATTTTCTCATTGCCATTGGAATAG
ATATCTCAGATTGTGTAGATATGCTATTTAAATAATTTATCAGGAAATACTGCCTGTAGAGTTAGTATTTCTATT
TTTATATAATGTTTGCACACTGAATTGAAGAATTGTTGGTTTTTCTTTTTTTGTTTTGTTTTTTTTTTTTTTT
TTTTTGTCTTTTGACCTCCCATTTTTACTATTTGCCAATACCTTTTTCTAGGAATGTGCTTTTTTTGTACACAT
TTTTATCCATTTTACATTCTAAAGCAGTGAAGTTGTATATTACTGTTTCTTATGTACAAGGAACAACAATAAAT
CATATGGAAATTTATATTT

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FIGURE 4139A

GT TTGTTAGGGAGTCGTGTGCGTGCCTTGGTCGCTTCTGTAGCTCCGAGGGCAGGTTGCGGAAGAAAGCCCAGGC
GGTCTGTGGCCAGAGGAAAGGCCTGCAGCAGGACGAGGACCTGAGCCAGGAATGCAGGATGCGGGCGGTGAAGA
AGGAAGGGGGTGCTCTGAGTGAAGCCATGTCCCTGGAGGGAGATGAATGGGAACTGAGTAAAGAAAATGTACAAC
CTTTAAGGCAAGGGCGGATCATGTCCACGCTTCAGGGAGCACTGGCACAAGAATCTGCCTGTAACAATACTCTTC
AGCAGCAGAAACGGGCATTTGAATATGAAATTCGATTTTACACTGGAAATGACCCTCTGGATGTTTGGGATAGGT
ATATCAGCTGGACAGAGCAGAATATCCTCAAGGTGGGAAGGAGAGTAATATGTCAACGTTATTAGAAAGAGCTG
TAGAAGCACTACAAGGAGAAAAACGATATTATAGTGATCCTCGATTTCTCAATCTCTGGCTTAAATTAGGGCGTT
TATGCAATGAGCCTTTGGATATGTACAGTTACTTGCACAACCAAGGGATTGGTGTTTCACTTGCTCAGTTCTATA
TCTCATGGGCAGAAGAATATGAAGCTAGAGAAAACCTT TAGGAAAAGCAGATGCGATATTTT CAGGAAGGGATTCAAC
AGAAGGCTGAACCACTAGAAAGACTACAGTCCCAGCACCGACAATTCCAAGCTCGAGTGTCTCGGCAAACTCTGT
TGGCACTTGAGAAAGAAGAAGAGGAGGAAGTTTTTGAGTCTTCTGTACCACAACGAAGCACACTAGCTGAACATA
AGAGCAAAGGGAAAAAGACAGCAAGAGCTCCAATCATCCGTGTAGGAGGTGCTCTCAAGGCTCCAAGCCAGAACA
GAGGACTCCAAAATCCATTTCTCAACAGATGCAAAAATAATAGTAGAATTACTGTTTTTGATGAAAATGCTGATG
AGGCTTCTACAGCAGAGTTGTCTAAGCCTACAGTCCAGCCATGGATAGCACCCCCCATGCCAGGGCCAAAGAGA
ATGAGCTGCAAGCAGGCCCTTGGAAACACAGGCAGGTCTTGGAAACACAGGCCTCGTGGCAATACAGCTTCACTGA
TAGCTGTACCCGCTGTGCTTCCCAGTTTCACTCCATATGTGGAAGAGACTGCACAACAGCCAGTTATGACACCAT
GTAAAATTGAACCTAGTATAAACCACATCCTAAGCACCAGAAAGCCTGGAAAGGAAGAAGGAGATTCTCTACAAA
GGGTT CAGAGCCATCAGCAAGCGTCTGAGGAGAAGAAAAGAGAAGATGATGTATTGTAAGGAGAAGATTTATGCAG
GAGTAGGGGAATTTCTCCTTTGAAGAAATTCGGGCTGAAGTTTTCCGGAAGAAATTAAAAGAGCAAAGGGAAGCCG
AGCTATTGACCAGTGCAGAGAAGAGAGCAGAAATGCAGAAACAGATTGAAGAGATGGAGAAGAAGCTAAAAGAAA
TCCAACTACTCAGCAAGAAAGAACAGGTGATCAGCAAGAAGAGACGATGCCTACAAAGGAGACAATACTAACTGC
AAATTGCTTCCGAGTCTCAGAAAATACCAGGAATGACTCTATCCAGTTCTGTTTGTCAAGTAACTGTTGTGCCA
GAGAACTTCACTTGCGGAGAACATTTGGCAGGAACAACCTCATTCTAAAGGTCCCAGTGACCTTTCTCCATTT
TTGATGAGTTTCTTCTTT CAGAAAAGAAGATAAAGTCTCCTGCAGATCCCCACGAGTTT TAGCTCAACGAA
GACCCCTTGCA GTTCTCAAAACCTCAGAAAGCATCACTCAAATGAAGATGTGTCTCCAGATGTTTGTGATGAAT
TTACAGGAATTGAACCTTGAGCGAGGATGCCATTATCACAGGCTTCAGAAATGTAACAATTTGTCCTAACCCAG
AAGACACTTGTGACTTTGCCAGAGCAGTCTGTTTTGTATCCACTCCTTTTCATGAGATAATGTCCTTGAAGGATC
TCCCTTCTGATCCTGAGAGACTGTTACCGGAAGAAGATCTAGATGTAAAGACCTCTGAGGACCAGCAGACAGCTT
GTGGCACTATCTACAGTCAGACTCTCAGCATCAAGAAGCTGAGCCCAATTATTGAAGACAGTCGTGAAGCCACAC
ACTCCTCTGGCTTCTCTGGTTCTTCTGCGCTCGGTTGCAAGCACCTCCTCCATCAAATGTCTTCAAATTCCTGAGA
AACTAGAACTTACTAATGAGACTTCAGAAAACCTACTCAGTCACCATGGTGTTTACAGTATCGCAGACAGCTAC
TGAAGTCCCTACCAGAGTTAAGTGCCCTCTGCAGAGTTGTGTATAGAAGACAGACCAATGCCTAAGTTGGAAATTG
AGAAGGAAATTGAATTAGGTAATGAGGATTACTGCATTAAACGAGAATACCTAATATGTGAAGATTACAAGTTAT
TCTGGGTGGCGCCAAGAACTCTGCAGAAATTAACAGTAATAAAGGTATCTTCTCAACCTGTCCCATGGGACTTTT
ATATCAACCTCAAGTTAAAGGAACGTTTAAATGAAGATTTTGATCATTTTTTGAGCTGTTATCAATATCAAGATG
GCTGTATTGTTTGGCACCAATATATAAACTGCTTCAACCTTCAGGATCTTCTCCAACACAGTGAATATATTACCC
ATGAAATAACAGTGTTGATTATTTATAACCTTTTGACAATAGTGAGAGATGCTACACAAAGCAGAAATAGTCCATG
GTGACTTGAGTCCAAGGTGTCTGATTCTCAGAAAAGAAATCCACGATCCCTATGATTGTAACAAGAACAATCAAG
CTTTGAAGATAGTGGAATTTTCTTACAGTGTGACCTTAGGGTGAGCTGGATGTTTTTACCCTCAGCGGCTTTC
GGACTGTACAGATCCTGGAAGGACAAAAGATCCTGGCTAACTGTTCTTCTCCCTACCAGGTAGACCTGTTTGGTA
TAGCAGATTTAGCACATTTACTATTGTTCAAGGAACACCTACAGGTCTTCTGGGATGGGTCTTCTGGAACTTA
GCCAAAATATTTCTGAGCTAAAAGATGGTGAATTGTGGAATAAATCTTTGTGCGGATTCTGAATGCCAATGATG
AGGCCACAGTGTCTGTTCTTGGGGAGCTTGCAGCAGAAATGAATGGGGTTTTTGACACTACATTCCAAAGTCACC
TGAACAAAGCCTTATGGAAGGTAGGGAAGTTAACTAGTCTGGGGCTTTGCTCTTTCAGTGAAGCTAGGCAATCAA
GTCTCACAGATTGCTGCCTCAGAGCAATGGTTGTATTGTGGAACACTGAACTGTATGTGCTGTAATTTAATTTA
GGACACATTTAGATGCACTACCATTGCTGTCTACTTTTTGGTACAGGTATATTTTGACGTCACTGATATTTTTT
ATACAGTGATATACTTACTCATGGCCTTGTCTAATTTTTGTGAAGAACTATTTTATTCTAAACAGACTCATTACA
AATGGTTACCTTGTTATTTAACCCTTTGTCTCTACTTTTCCCTGTACTTTTCCCATTTGTAATTTGTAATAATGT

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FIGURE 4139B

TCTCTTATGATCACCATGTATTTTGTAATAATAAATAGTATCTGTTAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4140

MAAVKKEGGALSEAMSLEGDEWELSKENVQPLRQGRIMSTLQGALAQESACNNTLQQQKRAFYEYIRFYTGNDPL
DVWDRIYISWTEQNYPQGGKESNMSTLLERAVEALQGEKRYYS DPRFLNLWLKLGRLCNEPLDMYSYLHNQGIGVS
LAQFYISWAEYEARENFRKADAI FQEGIQQKAEP LERLQSQRQFQARVSRQTLLALEKEEEEEVFESSVPQRS
TLAELKSKGKKTARAPI IRVGGALKAP SQNRGLQNPFPQQMQNNSRITVFDENADEASTAELSKPTVQFWIAPPM
PRAKENELQAGPWNTGRSLEHRPRGNTASLIAPPAVLPSFTPYVEETAQQPVMTPCKIEPSINHILSTRKPGKEE
GDSLQRVQSHQQASEEKKEKMMYCKEKIYAGVGEFSFEEIRAEVFRKKLKEQREAELLTSAEKRAEMQKQIEEME
KKLKEIQTTQQERTGDQQEETMPTKETTKLQIASESQKIPGMTLSSVCQVNCCARETSLAENIWQEQPHSKGPS
VPFSIFDEFLLEKKNKSPPADPPRVLAQRRPLAVLKTSESITSNEDVSPDVCDEFTGIEPLSEDAIITGFRNVT
ICPNPEDTCDFAARAARFVSTPFHEIMSLKDLPSPERLLPEEDLDVKTSEDQQTACGTIYSQTLSEIKKLSPIIED
SREATHSSGFSGSSASVASTSSIKCLQIPEKLELTNETSENPTQSPWCSQYRRQLLKSLELSASAELCIEDRPM
PKLEIEKEIELGNEDYCIKREYLICEDYKLFVWAPRNSAELTVIKVSSQVPWDFYINLKLKERLNEDFDHFCSC
YQYQDGCIVWHQYINCFTLQDLLQHSEYITHEITVLI IYNLLTIVEMLHKAIEIVHGDLSPRCLILRNRIHDPYDC
NKNNQALKIVDFSYSVDLRVQLDVFTLSGFRITVQILEGQKILANCSSPYQVDLFGIADLAHLLLFKEHLQVFWDG
SFWKLSQNISELKDGE LWNKFFVRILNANDEATVSVLGELAAEMNGVFDTTFQSHLNKALWKVGKLTSPGALLFQ

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FIGURE 4141A

CAGCCAGGGGCCACCCAGGGGCTATAAGAGCAACTAGATTTCTGGAGCAGCTCGGGGATGGGTGCCATTTGAGCC
CAGCTTGGCTCCCCCTCCTGGCTGGCTCCTTCCCTGCCCTTCTGCCCTGCCCTGTGTCTGCTGAGATTCTGCAAAGA
GGAACGTTGGCACCATGTCTCTGCTCAACCTGTCTGCTGCCCCCAAGGTGAAGGCCTATCTGAGCCAAGGGG
AGCGCTTCATCAAATGGGATGATGAACTACAGTTGCCTCTCCAGTTATCCTCCGTGTGGATCCTAAGGGCTACT
ACTTATACTGGACGTATCAAAGTAAGGAGATGGAGTTTCTGGATATCACCAGCATCCGGGATACTCGCTTTGGGA
AGTTTGCCAAGATGCCCAAGAGCCAGAAGCTCCGGGACGTCTTCAACATGGACTTTCCTGATAACAGTTTCCTGC
TGAAGACACTCACGGTGGTGTCCGGCCCGGACATGGTGGACCTCACCTTCCACAACCTTCGTCTCTACAAGGAGA
ACGTGGGCAAGGCCTGGGCTGAGGACGTACTGGCCCTAGTCAAACATCCGCTGACGGCCAACGCCCTCCCGCAGCA
CCTTCCCTGGACAAGATCCTTGTGAAGCTCAAGATGCAGCTCAACTCTGAAGGGAAGATTCCGGTGAAGAACTTTT
TCCAGATGTTTTCTGCTGACCGCAAGCGGGTGAAGCTGCTCTCAGTGCCTGCCACCTCCCCAAAGGCAAAAATG
ACGCCATCAATCCTGAGGACTTCCCAGAACCTGTCTACAAGAGTTTCTCATGAGCCTCTGTCTCGGCCAGAAA
TAGATGAGATCTTCACTTCTTACCATGCTAAGGCCAAACCTACATGACGAAGGAGCACCTGACCAAAATTCATCA
ACCAGAAACAGCGGGACTCCCGGCTTAACCTCCCTGCTGTTCCCGCCAGCACGGCCTGACCAGGTGCAGGGCCTCA
TCGACAAGTATGAGCCCAGTGGCATCAATGCACAGAGGGGCCAGCTGTACCTGAAGGCATGGTCTGGTTTTCTCT
GTGGGCCAGAGAACAGCGTGTGGGCCAGGACAAGCTGCTGCTCCACCACGACATGACGCAGCCACTCAATCATT
ACTTCATCAACTCGTCCCAACACCTACCTGACAGCCGGCCAGTTCTCAGGCCTCTCCTCGGCTGAGATGTACC
GCCAGGTGCTGCTCTCTGGCTGCCGTTGCGTGGAGCTAGACTGCTGGAAGGGGAAACCCCTGACGAGGAGCCCCA
TTATACCCATGGCTTACCATGACCACAGACATCTTCTCAAAGAAGCAATTGAGGCTATTGCAGAAAAGTGCT
TTAAGACCTCCCCCTATCCCATCATCTGTCTGTTTGAAGCATGTGGACTCACCCCGCCAGCAGGCTAAGATGG
CTGAGTATTGCCGACGATCTTTGGGATATGCTGCTCACAGAGCCCCTGGAAGTTCCCACTAAAACAGGTG
TCCCCCTGCCAGCCCTGAGGATCTCAGGGGCAAGATCCTCATCAAGAACAAGAAGAACAGTTTTTCTGGCCCCA
CCTCCTCCAGTAAGGATACCGGTGGGAGGCTGAGGGCAGCAGCCACCCAGTGCCCTGCAGTGTGGCTGGCG
AGGAAGGGACTGAGCTGGAGGAGGAGGAGGTGGAAGAGGAAGAGGAGGAGGAGTCAGGAAACCTGGATGAAGAAG
AGATTAAGAAGATGCAGTCGGATGAGGGCACAGCGGGCTGGAAGTGACGGCTTATGAGGAGATGTCCAGCCTAG
TCAATTACATCCAGCCCACCAAGTTCGTCTCCTTTGAGTTCTCTGCCCCAAAAGAACCGAAGTTATGTCATCTCGT
CCTTCACAGAGCTCAAGGCATATGACCTGCTCTCAAGGCCCTCGGTGCAGTTTGTGGACTACAACAAGCGCCAGA
TGAGCCGCATTTACCCCAAGGGAACCCGCATGGACTCCTCCAACATACATGCCCCAGATGTTCTGGAATGCTGGAT
GCCAGATGGTTGCCCTCAACTTCCAGACGATGGACTTGCCCATGCAGCAGAACATGGCAGTATTTGAGTTCAACG
GGCAGAGCGGCTACCTCCTCAAGCATGAGTTCATGCGCCGGCCGGACAAGCAGTTCAACCCCTTCTCAGTGGACC
GCATCGACGTGGTGGTGGCCACCACCTTTCCATTACGGTGATCTCTGGGCAGTTCTGTGAGAACGCAGCGTGC
GCACCTATGTAGAAGTGGAGCTGTTTGGCCTTCTGGGGACCCCAAGAGGCGCTATCGAACTAAGTGTCAACCA
GTACTAACTCCATCAATCTGTCTGGAAGGAGGAGCCCTTTGTCTTTGAGAAGATCTTGATGCCTGAGCTGGCCT
CCCTCAGAGTGGCTGTGATGGAGGAAGGCAACAAGTTTCTTGACACCGCATCATCCCCATCAATGCCCTAAATT
CTGGGTACCACCACCTGTGCCTGCACAGTGAGAGCAACATGCCCTCACCATGCCTGCGCTTTCATCTTCTCTGG
AGATGAAGGACTACATACCTGGTGTGTTGGGCAGATCTCACTGTGGCCCTCGCCAACCCCATTAAGTTCTTCAGTG
CCCATGACACGAAGTCTGTGAAGCTCAAGGAGGCCATGGGAGGTCTGCCTGAGAAGCCCTTCCCACTGGCGAGTC
CAGTTGCCAGCCAGGTCAATGGGGCGTTGGCCCCAACGAGCAATGGGTCAACCAGCAGCCAGGGCCGGGGCCAGGG
AAGAGGCTATGAAAGAAGCTGCGGAGCCGCGGACCGCCAGCCTGGAGGAGCTCCGGGAGCTAAAGGGCGTGGTGA
AGCTGCAGCGGCGGCACGAGAAGGAGCTGCGAGAGTTGGAGCGGCGCGGAGCGCGCGCTGGGAGGAGCTGCTGC
AGCGGGGCGCGGCGCAGCTGGCGGAGCTCGGGCCACCGGGCGTGGGGGCGCTCGGGGCTGCAAGCTCGGTCCCCG
GCAAGGGCTCTCGCAAGAAGAGGAGCCTGCCCGCGAGGAGAGCGCCGAGCCGCGCGGGCGAGGGCCCTGAGG
GCGTGGACGGGCGCGTGCGGGAGCTGAAAGACAGGCTGGAGCTGGAGCTGCTGCGGCAGGGCGAGGAGCAGTACG
AGTGCGTTCTGAAGCGCAAGGAGCAGCACGTGGCCGAGCAATCTCCAAAATGATGGAGCTGGCCAGAGAGAAAC
AGGCGGCAGAGCTGAAGGCCCTGAAGGAGACGTGCGAGAACGACACCAAGAGATGAAGAAAAAGCTGGAGACAA
AGAGACTGGAGCGGATCCAGGGCATGACCAAAGTCACCACAGACAAGATGGCCCAGGAGAGGTTGAAGAGAGAGA
TTAACAACCTCCACATCCAGGAAGTAGTGCAGGTGATCAAGCAGATGACGGAGAACTTGGAGAGGCACCAGGAGA
AGCTGGAGGAGAAGCAGGCGGCTTGCTGGAACAGATACGGGAGATGGAAGAGCAGTTCCAGAAGGAGGCGCTGG
CAGAGTACGAGGCCAGGATGAAGGGTCTGGAGGCAGAGGTGAAGGAGTCCGTGAGGGCCTGCCTCAGGACCTGCT

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FIGURE 4141B

TTCCCTCCGAGGCCAAGGACAAGCCTGAGAGGGCCTGCGAGTGCCCCCAGAGCTGTGTGAGCAGGACCCACTCA
TAGCAAAGGCAGATGCCCAGGAGAGCCGCCTCTGATGCCCCCATCCCACTGGGACATTTAGCAAGGAGGTTACAGC
CCCTTCTCTGGGATGTGGTTCTATTCCCCCAGGAAAAAGGAGCCCCAGCCTTCTGAGGCTGTGGGAACCTGTGGC
TGCCTTGGACGCTGCAGCCCCCTCCTCAACGGCCAGGCCAGAGTCTGAGACAGGACCCAGGCACCCCTACGGCAG
GGCCTCTCTGGGGCCTAGAAGTCTTCTCAAGCTGACTTCCTACCTCCCCCTCCATCTCTAGATAAGTGTCATATA
TTTGTTGAGGGCAAAGACTATGGACTGGAAGGCAGAAAGTGGGATCCTGGCCCCACTCTGCCTTTCCTATTGAG
CAACCAGCTCTGGGCTCAGTTTCCTCACCTGGAGGGTTGGACCCACTCACCTCCACTCTAGCCCCGAACCCCTCCT
GCCCCAGGCTTCCAGGCCCCATCAGGCCTGCCCTGAGTTGGCCTTGTCCTCCTTGAGGCAGATCCTGGCACTA
CCTCACAGCTCCCCTGGGGACGGCCACTCCCTGGCTGAGGGCCCTCCCCTCCCCTCTGCCTGTCCGGAACGGGAGG
CTGAAATGGAAAAGCTGCCTTGGCCCTGCTTGGCTGAGTCACAAGGGGCAGTGGGCTCTTGGGTGCTGTTCCACC
CTGACCCCTGGCTCACCCCTCTTCCTAGGCCTGGGGGCAGGCAGTTCCCTACCATGTACCCCTCTCAGGCTGCCTGC
CTGACAAGGTCAGCATCATTTGCTCTCCTGAATTTATGAGGTTTATTTATTTTCTCTTTCCTACTCCTATTAAA
GAACCTCGTCCCAGTGAAA

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FIGURE 4142

MSLLNPVLLPPKV KAYLSQGERFIKWDDETT VASPVILRVDPKGYYLYW TYQSKEMEFLDITSIRDTRFGKFAKM
PKSQKLRDVFNMDFPDNSFLLKTLTVVSGPDMVDLTFHNFVSYKENV GKAWAEDVLALVKHPLTANASRSTFLDK
ILVKLKMQLNSEGKIPVKNFFQMFPADRKRVEAALSACHLPKGKNDAINPEDFPEPVYKSFLMSLCPRPEIDEIF
TSYHAKAKPYMTKEHLTKFINQKQRDSRLNSLLFPPARPDQVQGLIDKYEPSGINAQRGQLSPEGMVWFLCGPEN
SVLAQDKLLLHHDMTQPLNHYFINSSHNTYLTAGQFSGLSAEMYRQVLLSGCRCVELDCWK GKPPDEEPIITHG
FTMTTDIFFKEAIEAIAESAFKTSPYPIILSFENHVDSPRQOAKMAEYCRTIFGDMLLTEPLEKFPLKPGVPLPS
PEDLRGKILIKNKNQFSGPTSSSKDTGGEAEGSSPPSAPAVWAGEEGTELEEEEEEVEEEEEESGNLDEEEIKKM
QSDEGTAGLEV TAYEEMSSLVNIQPTKFVSFEFSAQKNRSYVISSFTELKAYDLLSKASVQFVDYNKRQMSRIY
PKGTRMDSSNYPQMFWNAGCMVALNFQTM DLPMQONMAVFEFNGQSGYLLKHEFMRRPDKQFNPF SVDRIDVV
VATTL SITVISGQFLSERSVRTYVEVELFGLPGDPKRRYRTKLSPSTNSINPVWKEE PFVFEKILMPELASLRVA
VMEEGNKFLGHRIIPINALNSGYHHLCLHSES NMPLTMPALFIFLEM KDYIPGAWADLTVALANPIKFFSAHDTK
SVKLKEAMGGLPEKPFPLASPVASQVNGALAPTSNGSPAARAGAREEAMKEAAEPRTASLEELRELKGVVKLQRR
HEKELRELERRGARRWEELLQRGAQLAELGPPGVGGVGACKLGPGKGSRKRS LPREESAGAAPGEGPEGVDGR
VRELKDRLELELLRQGEQYECVLKRKEQHVAEQISKMMELAREKQAAELKALKETSENDTKEMKKKLETKRLER
IQGMTKVTTDKMAQERLKR EINNSHIQEVVQVIQMTENLERHQEKLEEKQAACLEQIREMEKQFQKEALAEYEA
RMKGLEAEVKESVRACLRTCFPSEAKDKPERACECPPELCEQDPLIAKADAQESRL

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FIGURE 4143

ATGTTCCCCCGCCCGCTGACCCCGCTGGCGGCCCCAAATGGCGCCGAGCCCCCTGGGCCGGGCGCTGAGGCGGGCC
CCTCTGGGCAGGGCCCGGGCGGGCTGGGTGGGCCGCCCTGCTGCTGCCGTCCATGCTGATGTTTGGGTGATC
GTGGCCTCCAGCGGGCTGCTGCTCATGATCGAGCGGGCATCCTGGCCGAGATGAAGCCCCCTGCCCTGCACCCG
CCCGGCCGCGAGGGCACAGCCTGGCGCGGAAAGCCCCCAAGCCTGGGGGCTGTCCCTCAGGGCTGGGGACGCG
GACTTGCAAGTGCGGCAGGACGTCCGGAACAGGACCCTGCGGGCGGTGTGCGGACAGCCAGGCATGCCCCGGGAC
CCCTGGGACTTGCCGGTGGGGCAGCGGCGCACCCCTGCTGCGCCACATCCTCGTAAGTGACCGTTACCGCTTCCTC
TACTGCTACGTCCCCAAGGTGGCCTGCTCTAAGTGAAGCGGGTGTGTAAGGTGCTGGCAGGCGTCCTGGACAGC
GTGGACGTCCGCCTCAAGATGGACCACCGCAGTGACCTGGTGTTCCTGGCCGACCTGCGGCCTGAGGAGATTTCGC
TACCGCCTGCAGCACTACTTTAAGTTCTGTTTGTGCGGGAGCCCTTGGAACGCCTCCTCTCTGCCACCGCAAC
AAGTTTGGCGAGATCCGAGAGTACCAGCAACGCTATGGGGCTGAGATAGTGAGGCGGTACAGGGCTGGAGCGGGG
CCCAGCCCTGCAGGCGACGATGTACATTCCCCGAGTTCTGAGATACCTGGTGGATGAGGACCCCTGAGCGCATG
AATGAGCATTGGATGCCCGTGTACCACCTGTGCCAGCCTTGTGCCGTGCACTATGACTTTGTGGGCTCCTATGAG
AGGCTGGAGGCTGATGCAAATCAGGTGCTGGAGTGGGTACGGGCACCACCTCACGTCCGATTTCCAGCTCGCCAG
GCCTGGTACCGGCCAGCCAGCCCCGAAAGCCTGCATTACCACTTGTGCAGTGCCCCCGGGCCCTGCTGCAGGAT
GTGCTGCCTAAGTATATCCTGGACTTCTCCCTCTTTGCCTACCCACTGCCTAATGTCACCAAGGAGGCGTGTGAG
CAGTGACCATGGGTGTGGGGCCAGCAGCTGGTGGGGACTGGTTTCAACGCCAGCTTTCTGTGCTTCTGCCTGTCA
TTCGGAGAACTCTGGCTCTGGGGCTTGGGGCTTCTCAGGATCCTGGATGGCAGAGACTGCCCTCAGAAGTTCTT
TGTCCAGGGTGGGCACCCACAGTGACTCAGAGGACAGGGCTAGGCAGGAGACCTGCTGCTCCTCATTGGGGGGAT
CTCTTGGGGGGCAGACACCAGTTTGCCAATGAAGCAACACATCTGATCTAAAGACTGGCTCCAGACCCCGGGCTG
CCAGGATTATGCAGTCCACTTGGTCTACCTTAATTTAACCTGTGGCCAACTCAGAGATGGTACCAGCCAGGGGC
AAGCATGACCAGAGCCAGGGACCCTGTGGCTCTGATCCCCATTTATCCACCCCATGTGCCTCAGGACTAGAGTG
AGCAATCATACCTTATAAATGACTTTTGTGCCTTTCTGCTCCAGTCTCAAATTTCTACACCTGCCAGTTCTTT
ACATTTTCCAAGGAAAGGAAACGGAAGCAGGGTTCTTGCCTGGTAGCTCCAGGACCCAGCTCTGCAGGCACCC
AAAGACCCTCTGTGCCAGCCTCTTCTTGTAGTTCTCGGAACCTCCTCCCTAATTCTCCCTTCTTCCCCACAAG
GCCTTTGAGGTTGTGACTGTGGCTGGTATATCTGGCTGCCATTTTTCTGATGCATTTATTTAAATTTGTACTTT
TTGATAGAACCCTTGTAAGGGCTTTGTTTTCTAATAGCTGACTTTTTAATAAAGCAGTTTTATATATAAAAAA
AAAAA

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FIGURE 4144

MFPRPLTPLAAPNGAEPLGRALRRAPLGRARAGLGPPPLLLPSMLMFAVIVASSGLLLLMIERGILAEMKPLPLHP
PGREGTAWRGKAPKPGGLSLRAGDADLQVRQDVNRNRTLRAVCGQPGMPRDPWDLVPGQRRILLRHILVSDRYRFL
YCYVPKVACSNWKRVMKVLAVGLDSVDVRLKMDHRSDLVFLADLRPEEIRYRLQHYFKFLFVREPLERLLSAYRN
KFGEIREYQQRYGAEIVRRYRAGAGPSPAGDDVTFPEFLRYLVDEDPERMNEHWMPVYHLCQPCAVHYDFVGSYE
RLEADANQVLEWVRAPPHVRFPARQAWYRPASPESLHYHLCSAPRALLQDVLPKYILDFSLFAYPLPNVTKEACQ
Q

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FIGURE 4145

ATGTGGCTGGACCGCCGCGGATGGCTCAGGGTTCCTGGACATTGGCGCTACGACCTTAGGCGCCCTAGCTTTACC
AGGACTTGGAGTGGCGATAAGGGCCCAATGGCAGAAACAGTGTCTACCCAGGTTGGGACAGAGGGCGGGCTGAGG
GCTTCGCATCAGCAAAACGGTGACGCTGGTGGCGACGCGAAGGTTGAGCTGTCCCCGGGGCCCCGAAGCCGGCT
GGCCGGGAAGTGGAGCCGGCCCCAGTAGGCGGGGAGCATCCCTCGGCTGCAGCCCCAGGCCCCGGGCAAGCATAAG
AAGCGGCGGGGCGCAACCAGGGAGCGTGTCTGCGCCCCCGAAGAAGCGGCGGACCGGGGTGAGCTTCGGAGAT
GAGCACTTTGCAGAAACCAGTTATTACTTCGAGGGCGGCCTGCGTAAGGTGCGGCCCTATTACTTTGACTTCCGG
ACCTACTGCAAAGGTCGCTGGGTGGGCCACAGCTTGCTGCACGTCTTCAGTACCGAGTTCCGAGCTCAGCCCCTG
GCCTACTATGAGGCCGCGGTCCGGGCGGGCCGCTGCAACTCAACGAGAAGCCGGTGCAGGACCTCAACATCGTG
CTCAAGGACAATGATTTCTTGCGGAACACAGTGCACAGGCATGAGCCACCAGTCACAGCAGAGCCCATTGCGCTG
CTAGCTGAGAACGAAGATGTGGTGGTTGTAGACAAGCCTTCCTCCATTCCCGTTACCCCCTGTGGCCGCTTCCGA
CACAACACAGTTATCTTCATCCTAGGCAAGGAGCACCAACTCAAGGAGCTACACCCCTTGCAATCGGCTTGACCGC
CTTACCTCAGGGGTGCTTATGTTTGCCAAGACAGCTGCAGTCTCTGAGAGAATTCACGAGCAGGTTTCGGGACCGG
CAGCTGGAGAAGGAGTACGTGTGCCGGGTGGAAGGGGAGTTCCCCACTGAGGAAGTGACCTGTAAAGAAGCCATC
TTAGTGGTGTCTTACAAAGTAGGGGTGTGCCGTGTAGATCCCCGGGGCAAGCCCTGTGAGACAGTGTTCAGAGG
CTAAGCTACAATGGCCAGTCCAGTGTGGTACGGTGCCGGCCACTCACAGGCCGCACACACCAGATTTCAGTCCAC
CTTCAGTTCTTGGGCCATCCCATTCTCAACGACCCCATCTACAACCTAGTTGCCTGGGGTCTTCTCGAGGCCGG
GGCGGCTACATTCCCAAGACAAACGAGGAGTTGCTACGGGACCTGGTAGCAGAGCACCAGGCCAAACAGAGCCTG
GATGTGCTAGATCTCTGTGAGGGTGACCTGTCCCCAGGACTCACAGACTCTACGGCCCCCTCCTCAGAGTTGGGC
AAGGACGACCTGGAAGAGTTGGCTGCAGCTGCCCAGAAGATGGAGGAAGTAGCTGAGGCAGCCCCCTCAGGAGTTG
GACACAATAGCCTTGGCATCAGAGAAGGCAGTTGAAACAGATGTCATGAATCAAGAGACAGACCCACTCTGTGCA
GAGTGCCGGCTGGTGCACAGGATCCCTTGCCCCAAGACCTTGTGATGTTCTACATGCCCTACGCTATAAAGGG
CCAGGCTTTGAGTACTTTTCACCAATGCCTGCCTGGGCACAGGATGACTGCAAAAGGACTGA

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FIGURE 4146

MWLDRRGWLRVLGHWRYDLRRPSFTRTWSGDKGPMETVSTQVGTEGGLRASHQQNGDAGGDAKVELSPGPPKPA
GREVEPAPVGGEHPSAAAPGPGKHKRRGATRERVVPPPKKRRTGVSGDEHFAETSYFEGGLRKVRPYFDFR
TYCKGRWVGHSLLHVFSTEFRAQPLAYYEAAVRAGRLQLNEKPVQDLNIVLKDNDFLRNTVHRHEPPVTAEP IRL
LAENEDVVVVDPSSIPVHPCGRFRHNTVIFILGKEHQLKELHPLHRLDRLTSGVLMFAKTAAVSERIHEQVRDR
QLEKEYVCRVEGEFPTTEEVTCKEPILVVSYKVGVCVRVDPGRKPCETVFQRLSYNGQSSVVRCPRLTGRTHQIRVH
LQFLGHPILNDPIYNSVAWGPPSRGRGGYIPKTNEELLRLVAEHQAKQSLDVLDLCEGDLSPGLTDSTAPSSELG
KDDLEELAAAAQKMEEVAEAPQELDTIALASEKAVETDVMNQETDPLCAECRLVRQDPLPQDLVMFLHALRYKG
PGFEYFSPMPAWAQDDWQKD

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FIGURE 4147

TAAGGAGAGTGCGGCGCTTCCCGAGGCGTGACGCTGGGAAGTGCACCTCATCTGGGTTGTGCGCAGAAGGCTGGG
GCAAGCGAGTAGAGAAGTGGAGCGTAAGCCAGGGGCGTTGGGGGCGGTGCGGGTCGGGCGCGTGCCACGCCCCGCG
GGGTGAAGTCGGAGCGCGGGGCCTGCTGGAGAGAGGAGCGCTGCGGACCGAGTAATGGCAATGCAGATGCAGCTT
GAAGCAAATGCAGATACCTTCAGTGGAAGAAGAAAGCTTTGGCCCACACCCATTTACGGTTAGAGCAGTGTGGC
ATAAATGCCAACGATGTGAAGAAATTGGAAGAAGCTGGATTCCATACGTGTGGAGGCTGTTGCCTATGCGCCAAAG
AAGGAGCTAATAAATATTAAGGGAATTAGTGAAGCCAAAGCTGATAAAATTCTGGCTGAGGCAGCTAAATTAGTT
CCAATGGGTTTTCACCACTGCAACTGAATTCCACCAAAGGCGGTGAGAGATCATAACAGATTACTGGCTCCAAA
GAGCTTGACAACTACTTCAAGGTGGAATTGAGACTGGATCTATCACAGAAATGTTTGGAGAATTCCGAACCTGGG
AAGACCCAGATCTGTCATACGCTAGCTGTCACCTGCCAGCTTCCCATTGACCGGGGTGGAGGTGAAGGAAAGGCC
ATGTACATTGACACTGAGGGTACCTTTAGGCCAGAACGGCTGCTGGCAGTGGCTGAGAGGTATGGTCTCTCTGGC
AGTGATGTCTGGATAATGTAGCATATGCTCGAGCGTTCAACACAGACCACCAGACCCAGCTCCTTTATCAAGCA
TCAGCCATGATGGTAGAATCTAGGTATGCACTGCTTATTGTAGACAGTGCCACCGCCCTTTACAGAACAGACTAC
TCGGGTCGAGGTGAGCTTTCAGCCAGGCAGATGCACTTGGCCAGGTTTCTGCGGATGCTTCTGCGACTCGCTGAT
GAGTTTGGTGTAGCAGTGGTAATCACTAATCAGGTGGTAGCTCAAGTGGATGGAGCAGCGATGTTTGCTGCTGAT
CCCAAAAACCTATTGGAGGAAATATCATCGCCCATGCATCAACAACCAGATTGTATCTGAGGAAAGGAAGAGGG
GAAACCAGAATCTGCAAAATCTACGACTCTCCCTGTCTTCTGAAGCTGAAGCTATGTTGCGCCATTAATGCAGAT
GGAGTGGGAGATGCCAAAGACTGAATCATTGGGTTTTTCTCTGTGTTAAAAACCTTAAGTGTGTCAGCCTAATGAG
AGTGCACCTGCTCCCTGGGGTTCTCTACAGGCCTCTTCTGTGTGACTGCCAGGATAAAAGCTTCCGGGAAAACAG
CTATTATATCAGCTTTTCTGATGGTATAAACAGGAGACAGGTCAGTAGTCACAACTGATCTAAAATGTTTATTC
CTTCTGTAGTGATTAATCTCTGTGTGTTTTCTTTGGTTTTGGAGGAGGGGTATGAAGTATCTTTGACATGGTGC
CTTAGGAATGACTTGGGTTTAACAAGCTGTCTACTGGACAATCTTATGTTTCCAAGAGAACTAAAGCTGGAGAGA
CCTGACCCTTCTCTCACTTCTAAATTAATGGTAAAATAAAATGCCTCAGCTATGTAGCAAAGG

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FIGURE 4148

GGCACGAGGCAGGCCAGGTGTGTGCGTCCGTCCGTCTTTCCGTGCCCACGCCGGAGACCAGCCCCGGAGGCCGCC
TGGGCCTATCCCTGTGCCAGGCACCATGAAGCAGGAGTCTGCAGCCCCGAACACCCCGCCACCTCGCAGTCCCC
TACGCCGTCCGCTCAGTTCCCCCGAAACGACGGCGACCCTCAAGCGCTGTGGATTTTCGGGTACGGCTCCCTGGT
GTGGAGGCCCGACTTCGCCTACAGCGACAGCCGTGTGGGCTTCGTGCGCGGCTACAGCCGCCGTTTCTGGCAGGG
AGACACCTTCCATCGGGGCAGCGACAAGATGCCTGGCCGTGTGGTGACGCTCCTTGAAGATCATGAGGGCTGCAC
TTGGGGCGTGGCATAACCAAGTGCAAGGGGAGCAGGTAAGCAAGGCCCTGAAGTACCTGAATGTGCGAGAGGCAGT
GCTTGGTGGCTACGATACCAAGGAGGTACCTTCTATCCCCAAGATGCTCCTGACCAACCACTGAAGGCATTGGC
CTATGTGGCCACCCACAGAACCTTGGTTACCTGGGCCCTGCGCCTGAAGAGGCCATTGCCACGCAGATCCTGGC
CTGCCGGGGCTTCTCCGGCCACAACCTTGAATACTTGTGCTGCGTCTGGCAGACTTCATGCAGCTCTGTGGGCCTCA
GGCGCAGGACGAGCACCTGGCAGCCATCGTGGACGCTGTGGGCACCATGTTGCCCTGCTTCTGCCCCACCGAGCA
GGCTCTGGCGCTGGTGTGAGGGGCTGAGCCCCCTGCGGGGAGTGCTCATGTGGACATCAGGGCCAGACACCCACTC
CAGTGCAACAAGACAGACTTGCGACCGCTTGAGCCCACTGAGCAGATATGGTGGTGGCTGGAGGCTTCTCTTTCT
CAGTCCCTGCCTGTCTGCCAGCCTGCAGCTCTCCTGCTTGACACTGACTTACTACTTGAACTTTATTTATTGCA
CCATGTTGGTGTGGTGGGCAGGTGGAGGGCTGCCCTGGACACAGGGGCCCTGCTGAGCAGTGGCCCCATCCTGG
AACTTGACCAGATTCCCCCAGTGCTGCTGCTAACCCACACCACCCAGGCCTCCACCTCCCCAGGGAGTCTCCA
AGAGCCTCGATCCTCTGCTCACTCAGCCCAGCCATCCATAGCCCTGGGAATTCCACCTGCCAAGGATCCCAGCAG
GCTGGATGAGGGATAGTAGGGCATGAGGAGAAGGAGCCCTGTAAGGACTGAGGCCCGGCCAGCCCTTCTCCTCC
ACCAGTTCCCCAGAGCAGAGCTGGAGCTGATGCCTGGACACAGCTGCTGAGCCTGGCCTGGGCCTCTTACCCACT
TGGTTGTTTTCTTGTCCCTCTGTCTGTCTGTCTATCTACTTGTCTGTCTGGGCCACTCCTGCCTGTGTGTTGGTC
TATTCCTGGGAAGCTCATCACTACAGGCCCTGGCAACCTTCCCAGTCTGTCCATACTGTTACCCATAAACTAT
CTCTTTAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4149

MKQESAAPNTPPTSQSPTPSAQFPRNDGDPQALWIFGYGSLVWRPDPFAYSDSRVGFVRGYSRRFWQGDTFHRGSD
KMPGRVVTLLEDHEGCTWGVAYQVQGEQVSKALKYLVNREAVLGGYDTKEVTFYPQDAPDQPLKALAYVATPQNP
GYLGPAPEEAIATQILACRGFSGHNLEYLLRLADFMQLCGPQAQDEHLAAIVDAVGTMPCFCPTEQALALV

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FIGURE 4150

AGGCCACAGGGCATGGATCAGCCCCACTGCATCTCAAGTGAAGTGTATAGCCAAGTCTTAAACCTCTCACGGGGC
AAGCCTGACACAGACCCCCCTTTAGATGCTCAGGCATACTGTTTCCATCCCGATTCCACTCTTCGGCTCTGACACG
TCCCTTGCAAAGTCTCCGCAGGTGCTGTGAAGAGCCTTCCATGGTAGAGATTTCTCTTAAGAGTGTGATTTCTCA
TAGGGCTAGTAAGGGAGATTGTATACCTGTTGTCCACAGTCTTCAGGCAGCTCCCCAGGTCTCTGAACCCCAGAG
TGTCGTCATTGGAGAGAGCAGTGAAGTGCAGAGATGGTGGAGGCCGCTAAGCATGGTAGAGGCTAGAGGAAGTCT
ATCCACAGGCAGTTGTGTTCCCAGCAATTCCTCCCATCCTGCATGGTTCACACCAAGAGAACCTTCAGATCCTAC
CAGCAACCGTAGCACCTTCCACCCAGGGGACTCCCAGAAGCCAGTAAAGAGACCAGGAGCCACCTCAATCAGCAG
GACAGCCTCACTGCCCCCTCTTGCAAGTCCCTTTGCCCATCTGAATGCACAGTCTCCCTGCTCATGCCCTTCA
GTCCCCCTGCTTGGCTGTATGCACTGTCTATATTGCACTGAGAGAGGAAGGGACAGCAGGAGTGAGGTGAAGAGGG
CGGAGAGAGGGGGCAGGCTCGGCACCGGCCCTCCCAGCCCGGCCAGCCTGAGCTTGCTGCCCTCCAGTAGAGACA
GAGGGGCAGTGTGTTGCAAGGGAGGTGTTTCTGCCTGTCCCTGCCTGATGTCCCTGGTGGAGCAGGTACCTCCGGG
CGGGCAAGCCTCTGATTTGCACACCTGAAAATCGCGGAATTGAGTTTCGATAGATTGATTTTTAAACTTTTTTG
GAGTAGGGGGTATAGGGGAATCATTTAATTTAAATCATTAAGATTCCCCTGCTCAAACCCAGATTCTGTGTACA
GATGCTATTTAGAGGGAATCAGAAAAATGCCAAGCCTTTTCTCTTTGAAATGTGCTATTTTTATAACTGAACTTGT
ACATATGTATAAAGAGAGACACATCTTCCTTTTACTAACTGGATAAAAAAATCTTAAATAAAATGGAGTGAGATA
ATTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4151

MVEISLKSVISHRASKGDCIPVVHSLQAAPQVSEPQSVVIGESSDCERWWRPLSMVEARGSLSTGSCVPSNSSHP
AWFTPREPSDPTSNRSTFHFGDSQKPVKRPGATSI SRTASLPLLQSPLCPS

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FIGURE 4152

GGGATTGGAACXCGCTGACGAAGTTTGGTGATCCATCTTCCGAGTATCGCCGGGATTTGGAATCGCGATGATCA
TCCCCTCTCTAGAGGAGCTGGACTCCCTCAAGTACAGTGACCTGCAGAACTTAGCCAAGAGTCTGGGTCTCCGGG
CCAACCTGAGGGCAACCAAGTTGTTAAAAGCCTTGAAAGGCTACATTAAACATGAGGCAAGAAAAGGAAATGAGA
ATCAGGATGAAAGTCAAACCTTCTGCATCCTCTTGTGATGAGACTGAGATACAGATCAGCAACCAGGAAGAAGCTG
AGAGACAGCCACTTGGCCATGTCACCAAAACAAGGAGAAGGTGCAAGACTGTCCGTGTGGACCCTGACTCACAGC
AGAATCATTGAGAGATAAAAAATAAGTAATCCCCTGAATTCCAGAATCATGAAAAGCAGGAAAGCCAGGATCTCA
GAGCTACTGCAAAAGTTCCCTTCTCCACCAGACGAGCACCAGAAGCTGAGAATGCTGTTTCCCTCAGGTAACAGAG
ATTCAAAGGTACCTTCAGAAGGAAAGAAATCTCTCTACACAGATGAGTCATCCAAACCTGGAAAAAATAAAAGAA
CTGCAATCACTACTCCAAACTTTAAGAAGCTTCATGAAGCTCATTTTTAAGGAAATGGAGTCCATTGATCAATATA
TTGAGAGAAAAAGAAACATTTTGAAGAACACAATTCATGAATGAAGTGAAGCAGCAGCCCATCAATAAGGGAGG
GGTCAGGACTCCAGTACCTCCAAGAGGAAGACTCTCTGTGGCTTCTACTCCCATCAGCCAACGACGCTCGCAAGG
CCGGTCTTGTGGCCCTGCAAGTCAGAGTACCTTGGGTCTGAAGGGGTCACTCAAGCGCTCTGCTATCTCTGCAGC
TAAAACGGGTGTCAGGTTTTCTAGCTGCTACTAAAGATAATGAGCATAAGCGTTCACTGACCAAGACTCCAGCCAG
AAAGTCTGCACATGTGACCGTGTCTGGGGGCACCCCAAAAGGCGAGGCTGTGCTTGGGACACACAAATTAAGAC
CATCAGGGGAATCTGCTGCTGTTATTACCCCATTCAGTTGACAACCTGAGGCAACGCAGACTCCAGTCTCCAA
TAAGAAACCAAGTGTGATCTTAAAGCAAGTTGTCTCGTCCCCTCAACTATGAACCACACAAAGGAAAGCTAAA
ACCATGGGGCAATCTAAAGAAAATAATTATCTAAATCAACATGTCAACAGAATTAACCTTCTACAAGAAAATTA
CAAACAACCCCATCTCCAGACAAAGGAAGAGCAACGGAAGAAACGCGAGCAAGAACGAAAGGAGAAGAAAGCAAA
GGTTTTGGGAATGCGAAGGGGCCCTCATTTGGCTGAAGATTAAATAATTTTTTAATATCTTGTAATATTCTGTGTA
TTCTCAACTTTTTTCCCTTTTGTAATTTTTTTTTTTTTTGCTGTCTATCCCCACTTTAGTCACGAGATCTTTTTCTG
CTAACTGTTTCATAGTCTGTGTAGTGTCCATGGGTCTTCATGTGCTATGATCTCTGAAAAGACGTTATCACCTTA
AAGCTCAAAATCTTTGGGATGGTTTTTACTTAAGTCCATTAACAATTCAGGTTTCTAACGAGACCCATCCTAAAA
TTCTGTTTCTAGATTTTTAATGTCAAGTTCCCAAGTTCCCCCTGCTGGTTCTAATATTAACAGAATGCACTCTT
CTGCTAGCCAATAGCATTTTACCTGATGGCAGCTAGTTATGCAAGCTTCAGGAGAATTTGAACAATAACAAGAATA
GGGTAAGCTGGGATAGAAAGGCCACCTCTTCACTCTCTATAGAATATAGTAACCTTTATGAAACGGGGCCATATA
GTTTGGTTATGACATCAATATTTTACCTAGGTGAAATTGTTTAGGCTTATGTACCTTCGTTCAAATATCCTCATG
TAATTGCCATCTGTCACTCACTATATTCACAAAAATAAACTCTACAACCTATTCTAACATTGCTTACTTAAAAG
CTACATAGCCCTATCGAAATGCGAGGATTAATGCTTTAATGCTTTTAGAGACAGGGTCTCACTGTGTTGCCCAGG
CTGGTCTCAAACCTCCACCAATGTACTTCTTATTCATTTTATGGAAAAGACTAGGCTTTGCTTAGTATCATGTCC
ATGTTTCCCTTACCTCAGTGGAGCTTCTGAGTTTTATACTGCTCAAGATCGTCATAAATAAAATTTTTTCTCATT
GTCAAAAAAAAAAAAAA

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FIGURE 4153

MNELKQQPINKGGVRTPVPPRGRLSVASTPISQRRSQGRSCGPASQSTLGLKGSLKRS AISAAKTGVRFSAA TKD
NEHKRSLTKTPARKSAHVTVSGGTPKGEAVLGTHKLKTITGNSAAVITPFKLTTEATQTPVSNKKPVFDLKASLS
RPLNYEPHKGKLPWGQSKENNYLNQHVNRINFYKKTYKQPHLQTKEEQRKKREQERKEKKAKVLGMRRGLILAE
D

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FIGURE 4154

ATGATCATCCCCTCTCTAGAGGAGCTGGACTCCCTCAAGTACAGTGACCTGCAGAACTTAGCCAAGAGTCTGGGT
CTCCGGGCCAACCTGAGGGCAACCAAGTTGTTAAAAGCCTTGAAAGGCTACATTAAACATGAGGCAAGAAAAGGA
AATGAGAATCAGGATGAAAGTCAAACCTTCTGCATCCTCTTGATGAGACTGAGATACAGATCAGCAACCAGGAA
GAAGCTGAGAGACAGCCACTTGGCCATGTCACCAAAACAAGGAGAAGGTGCAAGACTGTCCGTGTGGACCCTGAC
TCACAGCAGAATCATTAGAGATAAAAAATAAGTAATCCCCTGAATTCCAGAATCATGAAAAGCAGGAAAGCCAG
GATCTCAGAGCTACTGCAAAAGTTCCTTCTCCACCAGACGAGCACCAAGAAGCTGAGAATGCTGTTTCTCAGGT
AACAGAGATTCAAAGGTACCTTCAGAAGGAAAGAAATCTCTCTACACAGATGAGTCATCCAAACCTGGAAAAAAT
AAAAGAAGCTGCAATCACTACTCCAAACTTTAAGAAGCTTCATGAAGCTCATTTTAAGGAAATGGAGTCCATTGAT
CAATATATTGAGAGAAAAAAGAAACATTTTGAAGAACACAATTCCATGAATGAAGTGAAGCAGCCCATCAATAAG
GGAGGGGTCAGGACTCCAGTACCTCCAAGAGGAAGACTCTCTGTGGCTTCTACTCCCATCAGCCAACGACGCTCG
CAAGGCCGGTCTTGTTGGCCCTGCAAGTCAGAGTACCTTGGGTCTGAAGGGGTCCTCAAGCGCTCTGCTATCTCT
GCAGCTAAAACGGGTGTGACGTTTTTCAGCTGCTACTAAAGATAATGAGCATAAGCGTTCACTGACCAAGACTCCA
GCCAGAAAGTCTGCACATGTGACCGTGTCTGGGGGCACCCCAAAAGGCGAGGCTGTGCTTGGGACACACAAATTA
AAGACCATCACGGGGAATTCTGCTGCTGTTATTACCCCATTCAGTTGACAACTGAGGCAACGCAGACTCCAGTC
TCCAATAAGAAACCAGTGTTTGATCTTAAAGCAAGTTGTCTCGTCCCCTCAACTATGAACCACACAAAGGAAAG
CTAAAACCATGGGGGCAATCTAAAGAAAATAATTATCTAAATCAACATGTCAACAGAATTAAGTTCTACAAGAAA
ACTTACAAACAACCCCATCTCCAGACAAAGGAAGAGCAACGGAAGAAACGCGAGCAAGAACGAAAGGAGAAGAAA
GCAAAGGTTTTGGGAATGCGAAGGGGCCTCATTTTGGCTGAAGATTAA

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FIGURE 4155

MIIPSLEELDSLKYSIDLQNLAKSLGLRANLRATKLLKALKGYIKHEARKGNENQDESQTSASSCDETEIQISNQE
EAERQPLGHVTKTIRRRCKTVRVDPDSQQNHSEIKISNPTEFQNHKQESQDLRATAKVPSPPEHQAENAVSSG
NRDSKVPSEGKKSlytDESSKPGKNKRTAITTPNFKKLHEAHFKEMESIDQYIERKKKHFEHNSMNELKQPIN
GGVRTVPVPRGRLSVASTPISQRRSQGRSCGPASQSTLGLKGS�KRSASIAKTGVRFSATKDNEHKRSLTKTP
ARKSAHVTVSGGTPKGEAVLGTHKLKTITGNSAAVITPFKLTTEATQTPVSNKKPVFDLKASLSRPLNYEPHKGK
LKPWGQSKENNYLNQHVNRINFYKKTYPHLQTKKEQRKKREQERKEKKAKVLGMRRLILAED

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FIGURE 4156A

CCCCGCCCTCCTCCCTCCTCGCTCGCGGGCCGGGCCCCGGCATGGTGC GGCGCTCGCCGCCGATGGCGCTGAGGCGG
AGCATGGGGCGGCGGGGCTCCCGCCGCTGCCGCTGCCGCCGCCACCGCGGCTCGGGCTGCTGCTGGCGGCTCTG
GCTTCTCTGCTGCTCCCGAGTCCGCCGCCGAGGTCTGAAGCTCATGGGAGCCCCGGTGAAGCTGACAGTGTCT
CAGGGGCGAGCCGGTGAAGCTCAACTGCAGTGTGGAGGGGATGGAGGAGCCTGACATCCAGTGGGTGAAGGATGGG
GCTGTGGTCCAGAACTTGGACCAGTTGTACATCCAGTCAGCGAGCAGCACTGGATCGGCTTCCTCAGCCTGAAG
TCAGTGGAGCGCTCTGACGCCGGCCGGTACTGGTGCCAGGTGGAGGATGGGGGTGAAACCGAGATCTCCAGCCA
GTGTGGCTCACGGTAGAAGGTGTGCCATTTTTCACAGTGGAGCCAAAAAGATCTGGCAGTGCCACCCAATGCCCT
TTCCAAGTGTCTTGTGAGGCTGTGGGTCCCCCTGAACCTGTTACCATTGTCTGGTGGAGAGGAACCTACGAAGATC
GGGGGACCCGCTCCCTCTCCATCTGTTTTAAATGTAACAGGGGTGACCCAGAGCACCATGTTTTCTGTGAAGCT
CACAACCTAAAAGGCCCTGGCCTCTTCTCGCACAGCCACTGTTACCTTCAAGCACTGCCTGCAGCCCCCTTCAAC
ATCACCGTGACAAAGCTTTCAGCAGCAACGCTAGTGTGGCCTGGATGCCAGGTGCTGATGGCCGAGCTCTGCTA
CAGTCTGTACAGTTCAGGTGACACAGGCCCCAGGAGGCTGGGAAGTCTGGCTGTTGTGGTCCCTGTGCCCCC
TTTACCTGCCTGCTCCGGGACCTGGTGCTGCCACCAACTACAGCCTCAGGGTGCCTGTGCCAATGCCTTGGGG
CCCTCTCCCTATGCTGACTGGGTGCCCTTTCAGACCAAGGGTCTAGCCCCAGCCAGCGCTCCCCAAAACCTCCAT
GCCATCCGCACAGATTGAGCCTCATCTTGGAGTGGGAAGAAGTGATCCCCGAGGCCCCCTTGGGAAGGCCCTG
GGACCTACAACTGTCTGGGTTCAGACAATGGAACCCAGGATGAGCTGACAGTGGAGGGGACCAGGGCCAAT
TTGACAGGCTGGGATCCCCAAAAGGACCTGATCGTACGTGTGTGCGTCTCCAATGCAGTTGGCTGTGGACCCTGG
AGTCAGCCACTGGTGGTCTCTTCTCATGACCGTGCAGGCCAGCGCCCTCCTCACAGCCGCACATCTGGGTA
CCTGTGGTCTTGGTGTGCTAACGGCCCTGGTGACGGCTGCTGCCCTGGCCCTCATCTGCTTCGAAAGAGACGG
AAAGAGACGCGGTTTGGGCAAGCCTTTGACAGTGTATGGCCCCGGGAGAGCCAGCCGTTCACTTCCGGGCAGCC
CGGTCTTCAATCGAGAAAGGCCCGAGCGCATCGAGGCCACATTGGACAGCTTGGGCATCAGCGATGAATAAAG
GAAAAACTGGAGGATGTGCTCATCCAGAGCAGCAGTTACCCCTGGGCCGGATGTTGGGCAAGGAGAGTTTGGT
TCAGTGGCGGAGGCCCAGCTGAAGCAAGAGGATGGCTCCTTTGTGAAAGTGGCTGTGAAGATGCTGAAAGCTGAC
ATCATTGCCCTCAAGCGACATTGAAGAGTTCCCTCAGGGAAGCAGCTTGATGAAGGAGTTTGACCATCCACACGTG
GCCAAACTTGTGGGGTAAGCCTCCGGAGCAGGGCTAAAGGCCGTCTCCCCATCCCCATGGTCATCTTGCCCTTC
ATGAAGCATGGGGACCTGCATGCCTTCCTGCTCGCCTCCCGGATTGGGGAGAACCCTTTAACCTACCCCTCCAG
ACCCTGATCCGGTTTCATGGTGGACATTGCCTGCGGCATGGAGTACCTGAGCTCTCGGAACCTTCATCCACCGAGAC
CTGGCTGCTCGGAATTGCATGCTGGCAGAGGACATGACAGTGTGTGTGGCTGACTTCGGACTCTCCCGGAAGATC
TACAGTGGGGACTACTATCGTCAAGGCTGTGCCCTCCAAACTGCCTGTCAAGTGGCTGGCCCTGGAGAGCCTGGCC
GACAACCTGTATACTGTGCAGAGTGACGTGTGGGCGTTTCGGGGTGACCATGTGGGAGATCATGACACGTGGGCAG
ACGCCATATGCTGGCATCGAAAAAGCTGAGATTTACAACTACCTCATTGGCGGGAACCGCCTGAAACAGCCTCCG
GAGTGTATGGAGGACGTGTATGATCTCATGTACCAGTGTGGAGTGTGACCCCAAGCAGCGCCCCGAGCTTTACT
TGTCTGCGAATGGAAGTGGAGAACATCTTGGGCCAGCTGTCTGTGCTATCTGCCAGCCAGGACCCCTTATACATC
AACATCGAGAGAGCTGAGGAGCCCACTGCGGGAGGCAGCCTGGAGCTACCTGGCAGGGATCAGCCCTACAGTGGG
GCTGGGGATGGCAGTGGCATGGGGGCAGTGGGTGGCACTCCAGTGACTGTGCGTACATACTACCCCCGGAGGG
CTGGCTGAGCAGCCAGGGCAGGCAGAGCACCAGCCAGAGAGTCCCCTCAATGAGACACAGAGGCTTTTGCTGCTG
CAGCAAGGGCTACTGCCACACAGTAGCTGTTAGCCACAGGCAGAGGGCATCGGGGCCATTTGGCCGGCTCTGGT
GGCCACTGAGCTGGCTGACTAAGCCCCGTCTGACCCAGCCAGACAGCAAGGTGTGGAGGCTCCTGTGGTAGTC
CTCCCAAGCTGTGCTGGGAAGCCCGACTGACCAAATCACCAATCCAGTTCTTCTGCAACCACTCTGTGGCC
AGCCTGGCATCAGTTTAGGCCTTGGCTTGATGGAAGTGGGCCAGTCTGGTTGTCTGAACCCAGGCAGCTGGCAG
GAGTGGGGTGGTTATGTTTCCATGGTTACCATGGGTGTGGATGGCAGTGTGGGAGGGCAGGTCCAGCTCTGTGG
GCCCTACCCCTCCTGCTGAGCTGCCCTGCTGCTTAAGTGCATGCATTGAGCTGCCTCCAGCCTGGTGGCCAGCT
ATTACCACACTTGGGGTTTAAATATCCAGGTGTGCCCTTCAAGTCACAAAGAGATGTCCTTGTAATATTCCTT
TTAGGTGAGGGTTGGTAAGGGGTGGTATCTCAGGTCTGAATCTTCACCATCTTCTGATTCCGCACCCCTGCCTA
CGCAGGAGAAGTTGAGGGAGCATGCTTCCCTGCAGCTGACCGGGTCACACAAAGGCATGCTGGAGTACCCAGC
CTATCAGGTGCCCTCTTCCAAAGGCAGGTGCCGAGCCAGCAAGAGGAAGGGGTGCTGTGAGGCTTGCCAGGA
GCAAGTGAGGCCGAGAGGAGTTCAGGAACCTTCTCCATACCCACAATCTGAGCACGCTACCAATCTCAAAAT
ATCCTAAGACTAACAAAGGCAGCTGTGTCTGAGCCCAACCCTTCTAAACGGTGACCTTTAGTGCCAACTTCCCTT

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FIGURE 4156B

CTAACTGGACAGCCTCTTCTGTCCCAAGTCTCCAGAGAGAAATCAGGCCTGATGAGGGGGAATTCCTGGAACCTG
GACCCAGCCTTGGTGGGGGAGCCTCTGGAATGCATGGGGCGGGTCCTAGCTGTTAGGGACATTCCAAGCTGTT
AGTTGCTGTTTAAAAATAGAAATAAAATTGAAGACTAAAGACCTA

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FIGURE 4157

ATGAATAAAACTGACAAAAATCCTTGCTTTCAGAAATTTGTCATTGCCATCTCAACCAAAACTGGCATTAGCAAT
GTAAAAATCCCAAAACATCTTATTGATGCTCACTTCGAGAAGCAGTTGCAGAAGCCCAGACACCAGGAAGGTGAG
ATCTCTGACACAGAAAAAGAGAACTACAAGACTACAGAGCAGTGCAAGATTGATCAGAAAGCTGTGGACTCACAA
ATTGTACGAAAAATCAAAGCTATTCTCAGCTCCAGGGCTACCTGCGATCTGTGTTTGCCCTGACGAATGGAATT
TATCCTCACAAATTGGTGTTTTAA

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FIGURE 4158

MNKTDKNPCFQKFVIAISTKTGISNVKIPKHLIDAHFEKQLQKPRHQEGEISDTEKENYKTEQCKIDQKAVDSQ
IVRKIKAIPQLQGYLRSVFALTNGIYPHKLVF

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FIGURE 4159

GGGAGAGTCGAACCCGGAGCAGGGTCCCATCCGAGCGTGGACTGGCGGCAGGATGTTTCAGCTGGATGGGGCGGCA
GGCGGGCGGGCGCGAACGCGCTGGCGGGCGCGGACGCGGTGCAGACGGTGACGGGCGGGCTGCGCTCGCTCTACCT
GCGCAAGGTGCTGCGCTGGAGGAGGCGTACCGCTTCCACGAGTTCCACTCGCCTGCGCTGGAGGACGCCGACTT
CGAGAACAAAGCCCATGATCCTGCTGGTGGGCCAGTACAGCACCGGCAAGACCACCTTCATCAGATACCTACTGGA
GCAGGATTTCCAGGCATGAGGATTGGTCCGGAGCCCACCACAGACTCCTTCATCGCCGTGATGTATGGAGAGAC
TGAGGGCAGCACCCCAGGGAATGCTTTAGTCGTGGACCCAAAAAGCCGTTTAGAAAGCTCAGTCGCTTTGGAAA
CGCTTTTCTGAATCGATTTCATGTGCTCACAGCTCCCCAATCAGGTCTTGAAGAGCATCAGCGTCATCGACAGCCC
CGGCATCCTTTCTGGGGAGAAGCAGCGCATCAGCCGAGGCTATGACTTCTGCCAGGTCTGCAGTGGTTTGGCGA
GAGGGTGGACAGGATCATCCTGCTCTTTGACGCTCACAAGCTGGACATCTCAGATGAATTCTCAGAGGCCATCAA
GGCCTTCCGGGGCCAGGACGACAAGATCCGTGTCTGCTGAACAAGGCCGACCAAGTGGACACGCAGCAGCTGAT
GCGGGTCTACGGGGCCCTCATGTGGTCCCTAGGCAAGGTCTCAACACGCCCCGAGGTACTGCGCGTCTACATTGG
CTCCTTCTGGGCGCAGCCCCCTGCAGAACACGGACAACCGCCGGCTCTTCGAGGCTGAGGCCCAGGACCTCTTTAG
AGACATCCAGAGCCTCCCCAGAAGGCAGCGGTGCGCAAGCTCAACGACCTCATCAAGCGAGCGAGGCTGGCCAA
GGTGCATGCCTACATCATCAGCTACCTGAAGAAGGAGATGCCAAGTGTATTTGGAAGGAAAACAAGAAGAGAGA
GCTTATCAGCAGGCTACCGGAAATCTACATTAGCTACAGCGAGAATACCAGATTTCTGCAGGGGACTTCCCTGA
GGTCAAGGCTATGCAGGAACAGCTTGAGAACTATGACTTCACCAAATTCCTCGCTGAAGCCCAAGCTGATCGA
GGCAGTGGACAACATGCTGAGCAACAAGATCTCGCCCCCTCATGAACCTCATCAGCCAGGAGGAGACGAGCACGCC
CACGCAGCTGGTGCAGGGCGGCGCCTTCGATGGCACCACCGAGGGCCCTTCAACCAGGGCTACGGGGAGGGTGC
CAAGGAGGGCGCCGACGAGGAGGAGTGGGTCTGGCCAAAGACAAGCCCGTCTACGACGAGCTCTTCTACACTCT
GTCGCCCATCAATGGCAAGATATCAGGTGTCAACGCCAAGAAGGAGATGGTGACCTCCAAGCTGCCCAACAGCGT
CCTGGGCAAGATCTGGAAGCTGGCCGACTGCGACTGCGACGGCATGCTTGATGAGGAGGAGTTCGCGCTGGCCAA
GCACCTCATCAAGATCAAGCTCGACGGCTACGAGCTGCCAGCAGCCTGCCCCCCACCTCGTGCCCCCTCGCA
CAGGAAGTCCCTGCCCAAGGCCGACTGAGGGGTGGGCTGCAGAACGGGGTGGGAACCTGGGGGACCTGGGCCTCAG
GCCTGCTCCACCACTGACTCACCGAATGACCTTGGGCAAGGCACTGCCCTCTCTGTGCCTTGGTTTCCCCATCTG
TAGAATGGGGAGGGTGGACACTGGAACTAGATGACTTCTTTACCTCCAAAATTCCTTAGTTTCTATGAAAAT
ATTGGGGGTAGGGGGGTGGATTAGGAGATTGAAGGGTTGAGAAGAAAGAGAAATTGTCCAAAGAGTCCTCAGAAC
CTGCCTGGAGAAATGCGCATGGGGGTGGGCCTGGTAAGTCCCAGGAACACAGGAAGTGAGCTAAGGCTCACCCA
GAGCAGCTGGGTCTCCAGGCTGCCTGGGCTTTTTGTCTCATGAACAACCTCTGGAGCAGCTGTCTGTCCCTCAGA
GGGCACCTGGAGGCAGCAAAGATTATCTTATTTATTTTATTTTGTCTTCTGCTATATTTAGAGTGGCAAAAAAT
AGAGCAGAGGGGTTTCTGCTGTCTCCAGACTGTCTACCAAAGAGAAGGCGACAGATGCCTCCTGGGTTTGGAAAGG
GGATGCACTGTGGATCTGCCATCCATTCTGCAGTCTCCAGCAGAGCAGGCAGTCAGGCCCCAGCGTGCCTCCATC
CCAGTGCCCCGATGACCATCTGGTCAGCCCTCCCAACCTCCCTTCCAGGGGGCTTACCAGCAAAGCCATATTCCG
CTAGGAATTTGGAATTCACAACCTTTATTAACCCCTGGCAAACTTCCCGTTTGCATGTCAAATCACATTGAAGC
CTGAAAATTAGCTTTTCTTACTGGTTTTTCCAATAAGTAATAGCAAAGCCCACTTATCATACTTAACTACAGTA
AAGAAAAGAGGTGGTTCTCTGCAGTGATCGTTTAGTGTGGCCCTCAAACATTAAATATCCCAGGCTCTCCTTGGT
GGGTGGCAGGATTTAAATTCAAATCCTGTCTAGTGTGTGCAGTGTCTTCGGCCCTGTGGACACAGGTGAA
TGAGGGACCAGCCCTGCCCTGGGCTGTTGAGAAGAGATCAGTCCACCCAGAGTTAGACATTGTTTTTGTAGAAAA
CAGGCATTTATTATGTCTAGGGTTTTGTGTTTTTTTTTTTCTTACAGGATAAAAGCCTTTATACAGAAACAAA
ATGGAACCTTTCATATAAAACCTTTTCTTT

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FIGURE 4160

CGAACCCGGAGCAGGGTCCCATCCGAGCGTGGACTGGCGGCAGGATGTTTCAGCTGGATGGGGCGGCAGGCGGGCG
GGCGCGAACGCGCTGGCGGGCGCGGACGCGGTGCAGACGGTGACGGGCGGGCTGCGCTCGCTCTACCTGCGCAAGG
TGCTGCCGCTGGAGGAGGCGTACCGCTTCCACGAGTTCCACTCGCCTGCGCTGGAGGACGCCGACTTCGAGAACA
AGCCCTTCTACACTCTGTGCGCCCATCAATGGCAAGATATCAGGTGTCAACGCCAAGAAGGAGATGGTGACCTCCA
AGCTGCCCAACAGCGTCCTGGGCAAGATCTGGAAGCTGGCCGACTGCGACTGCGACGGCATGCTTGATGAGGAGG
AGTTTCGCGCTGGCCAAGCACCTCATCAAGATCAAGCTCGACGGCTACGAGCTGCCCAGCAGCCTGCCCCCCCACC
TCGTGCCCCCTCGCACAGGAAGTCCCTGCCCAAGGCCGACTGAGGGGTGGGCTGCAGAACGGGGTGGGAAGTGG
GGGACCTGGGCCTCAGGCCTGCTCCACCACTGACTCACCGAATGACCTTGGGCAAGGCACTGCCCTCTCTGTGCC
TTGGTTTTCCCCATCTGTAGAATGGGGAGGGTGGACACTGGAACTAGATGACTTCTTTCACCTCCAAAATTCCTT
TAGTTTCTATGAAAATATTGGGGGTAGGGGGGTGGATTAGGAGATTGAAGGGT

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FIGURE 4161

ATGCCGACCGTCATTAGCGCATCTGTGGCTCCAAGGACAGCGGCTGAGCCCCGGTCCCCAGGGCCAGTTCTCTCAC
CCGGCCCCAGAGCAAGGCCACTGAGGCTGGGGGTGGAAACCCAAGTGGCATCTATTTCAGCCATCATCAGCCGCAAT
TTTCTATTATCGGAGTGAAAGAGAAGACATTTCGAGCAACTTCACAAGAAATGTCTAGAAAAGAAAGTTCTTTAT
GTGGACCCCTGAGTTCCCACCGGATGAGACCTCTCTCTTTTATAGCCAGAAGTTCCCCATCCAGTTCGTCTGGAAG
AGACCTCCGGAAATTTGCGAGAATCCCCGATTTATCATTGATGGAGCCAACAGAACTGACATCTGTCAAGGAGAG
CTAGGGGACTGCTGGTTTCTCGCAGCCATTGCCTGCCTGACCCTGAACCAGCACCTTCTTTTCCGAGTCATACCC
CATGATCAAAGTTTCATCGAAAACCTACGCAGGGATCTTCCACTTCCAGTTCTGGCGCTATGGAGAGTGGGTGGAC
GTGGTTATAGATGACTGCCTGCCAACGTACAACAATCAACTGGTTTTCCCAAGTCCAACCACCGCAATGAGTTC
TGGAGTGCTCTGCTGGAGAAGGCTTATGCTAAGCTCCATGGTTCCTACGAAGCTCTGAAAGGTGGGAACACCACA
GAGGCCATGGAGGACTTCACAGGAGGGGTGGCAGAGTTTTTTGAGATCAGGGATGCTCCTAGTGACATGTACAAG
ATCATGAAGAAAGCCATCGAGAGAGGCTCCCTCATGGGCTGCTCCATTGATGATGGCACGAACATGACCTATGGA
ACCTCTCCTTCTGGTCTGAACATGGGGGAGTTGATTGCACGGATGGTAAGGAATATGGATAACTCACTGCTCCAG
GACTCAGACCTCGACCCAGAGGCTCAGATGAAAGACCGACCCGACAATCATTCCGGTTCAGTATGAGACAAGA
ATGGCCTGCGGGCTGGTCAGAGGTCACGCCTACTCTGTACGGGGCTGGATGAGGTCCCGTTCAAAGGTGAGAAA
GTGAAGCTGGTGGGCTGCGGAATCCGTGGGGCCAGGTGGAGTGAACGGTTCTTGGAGTGATAGATGGAAGGAC
TGGAGCTTTGTGGACAAAGATGAGAAGGCCCGTCTGCAGCACCAGGTCACTGAGGATGGAGAGTTCTGGATGTC
TATGAGGATTTTCATCTACCATTTTCAAAGTTGGAGATCTGCAACCTCACGGCCGATGCTCTGCAGTCTGACAAG
CTTCAGACCTGGACAGTGTCTGTGAACGAGGGCCGCTGGGTACGGGGTTGCTCTGCCGGAGGCTGCCGCAACTTC
CCAGATACTTTCTGGACCAACCCTCAGTACCGTCTGAAGCTCCTGGAGGAGGACGATGACCCTGATGACTCGGAG
GTGATTTGCAGCTTCTTGGTGGCCCTGATGCAGAAGAACCGGCGGAAGGACCGGAAGCTAGGGGCCAGTCTCTTC
ACCATTGGCTTCGCCATCTACGAGGTTCCCAAAGAGATGCACGGGAACAAGCAGCACCTGCAGAAGGACTTCTTC
CTGTACAACGCCTCCAAGGCCAGGAGCAAAACCTACATCAACATGCGGGAGGTGTCCAGCGCTTCCGCCTGCCT
CCCAGCGAGTACGTATCGTGCCCTCCACCTACGAGCCCCACCAGGAGGGGGAATTCATCTCCGGGTCTTCTCT
GAAAAGAGGAACCTCTCTGAGGAAGTTGAAAATACCATCTCCGTGGATCGGCCAGTGAAAAAGAAAAAACCAAG
CCCATCATCTTCGTTTCGGACAGAGCAAAACAGCAACAAGGAGCTGGGTGTGGACCAGGAGTCAGAGGAGGGCAAA
GGCAAAACAAGCCCTGATAAGCAAAAGCAGTCCCCACAGCCACAGCCTGGCAGCTCTGATCAGGAAAGTGAGGAA
CAGCAACAATTCGGGAACATTTTCAAGCAGATAGCAGGAGATGACATGGAGATCTGTGCAGATGAGCTCAAGAAG
GTCTTTAACACAGTTCGTGAACAAACACAAGGACCTGAAGACACACGGGTTTCACTGGAGTCTGCGGTAGCATG
ATTGCGCTCATGGATACAGATGGCTCTGGAAAGCTCAACCTGCAGGAGTTCCACCACCTCTGGAACAAGATTAAG
GCCTGGCAGAAAAATTTTCAAACACTATGACACAGACAGTCCGGCACCATCAACAGCTACGAGATGCGAAATGCA
GTCAACGACGCAGGATTCCACCTCAACAACCAGCTCTATGACATCATTACCATGCGGTACGCAGACAAACACATG
AACATCGACTTTGACAGTTTCATCTGCTGCTTGGTGGAGGCGATGTTTCAGAGCTTTTCATGCATTTGAC
AAGGATGGAGATGGTATCATCAAGCTCAACGTTCTGGAGTGGCTGCAGCTCACCATGTATGCCTGA

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FIGURE 4162

MPTVISASVAPRTAAEPRSPGPVPHPAQSKATEAGGGNPSGIYSIIISRNFP IIGVKEKTFEQLHKKCLEKKVLY
VDPEFPPDETS LFYSQKFPIQFVWKRPP EICENPRFIIDGANRTDICQGELGDCWFLAAIACLT LNQHLLFRVIP
HDQSF IENYAGIFHFQFWRYGEWVDVVIDDCLPTYNQLVFTKSNHRNEFW SALLEKAYAKLHGSYEALKGGNTT
EAMEDFTGGVAEFFEIRDAPSDMYKIMKKA IERGSLMGCSIDDGTNMTYGTSPSGLNMGELIARMVRNMDNSLLQ
DSDLDPRGSDERPTRTIIPVQYETRMACGLVRGHAYSVTGLDEVFPKGEKVKLVR LRNPWGQVEWNGSWSDRWKD
WSFVDKDEKARLQH QVTEDGEFWMSYEDFIYHFTKLEICNLTADALQSDKLQTWTVSVNEGRWVRGCSAGGCRNF
PDTFWTNPQYRLKLLEDDDDPDDSEVIC SFLVALMQKNRRKDRKLGASLFTIGFAIYEVPKEMHGKQHLQKDFE
LYNASKARSKTYINMREVSQRFR LPPSEYVIVPSTYEPHQEGEFILRVFSEKRN LSEEVENTISVDRPVKKKTK
PIIFVSDRANSNKELGVDQSEEGKGKTS PDKQKQSPQPQPGSSDQSEEEQQQFRNIFKQIAGDDMEICADELKK
VLNTVVNKHKDLKTHGFTLESCRS MIALMDTDGSGKLN LQEFHHLWNKIKAWQKIFKH YD TDQSGTINSYEMRNA
VNDAGFHLNNQLYDIITMRYADKHMNIDFDSF ICCFVRLEGMFRAFHAFDKDGDGI I KLVLEWLQLTMYA

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FIGURE 4163A

CAACAATTTATAGAATTGGATTGAAAGTGCCACCTGATGAAAGGGATCCTCGAGTCCCCATGCTGACCTGGAGCA
CCTGCGCTTTCACTATCCAGGCAATTGAAAATCTATTGGGAGATGAAGGAAAACCTCTGTTTGGAGCACTTCAAA
ATAGGCAGCATAATGGTCTGAAAGCATTAAATGCAGTTTGCAGTTGCACAGAGGATTACCTGTCCTCAGGTCCTGA
TACAGAAACATCTGGTTTCGTCTTCTATCAGTTGTTCTTCCTAACATAAAAATCAGAAGATACACCATGCCTTCTGT
CTATAGATCTGTTTCATGTTTTGGTGGGTGCTGTGTAGCATTCCCATCCTTGTATTGGGATGACCTGTTGATC
TGCAGCCTTCTTCAGTTAGTTCTTCTATAACCACCTTTATCTCTTCCATTGATCACCATGGCACACATGCTTC
AGATACTACTTACAGTAGACACAGGCCTACCCCTTGCTCAGGTTCAAGAAGACAGTGAAGAGGCTCATTCCGCAT
CTTCTTTCTTTGCGAGAAATTTCTCAATATACAAGTGGCTCCATTGGGTGTGATATTCCCTGGCTGGTATTTGTGGG
TCTCACTGAAGAATGGCATCACCCCTTATCTTCGCTGTGCTGCATTGTTTTTCCACTATTTACTTGGGGTAACTC
CGCCTGAGGAACATGCATACCAATTCTGCAGAAAGGAGAGTACAGTGCCTCTGTAGCTATCTATCTTTACCTACAA
ATTTGTTTCTGCTCTTCCAGGAATATTGGGATACTGTAAGGCCCTTGCTCCAGAGGTGGTGTGCAGATCCTGCCT
TACTAAACTGTTTGAAGCAAAAAACACCGTGGTCAGGTACCCTAGAAAAAGAAATAGTTTGTATAGAGCTTCTCTG
ATGACTATAGCTGCCCTCTGAATCAAGCTTCTCATTTCAGGTGCCACGGTCTGCAGATGATGAGCGAAAGCATC
CTGTCCTCTGCCCTTTTCTGTGGGGCTATACTATGTTCTCAGAACATTTGCTGCCAGGAAATTGTGAACGGGGAAG
AGGTTGGAGCTTGCATTTTTTACGCACTTCACTGTGGAGCCGGAGTCTGCATTTTCTAAAAATCAGAGAATGCC
GAGTGGTCTGGTTGAAGGTAAAGCCAGAGGCTGTGCCTATCCAGCTCCTTACTTGGATGAATATGGAGAAACAG
ACCCTGGCCTGAAGAGGGGCAACCCCTTCAATTATCTCGTGAGCGGTATCGGAAGCTCCATTGTTGCTGGCAAC
AACACTGCATTATAGAAGAGATTGCTAGGAGCCAAGAGACTAATCAGATGTTATTTGGATTCAACTGGCAGTTAC
TGTGAGCTCCAACCTGCTCAAGACAATCACAATGACGACAGTAGTAAAGGCTGATTCAAAATATGGAAC
TTCTGAGGGCTGGGAAAGTATTGGAGGGTCTTTTGTCTCCATGTCCAGGTTCACTTACATCAATAAAATATTTCT
TAATGGAGTATTGCTTTCAATTAGCAAACATATGCTTCACAGGAAAAAGGACATAGATCAATCTGTTTTATGTG
CTAGTATTTCCAGGAATTTATTTCCCTTCATAATTTGTCTCATTTCATTTTATTTTATCCACTTGGTAGATGAAG
TCACGTCAAACAGTTGTAGACATTTTATATGTTGGTTAACTCTTCTGCAATTTTGTATTTGGTGTTTTCCCCCA
AGTTTAGTTCAACTGACATTGGATCACTGACAAAATTCTAATAATCTGTGATAGTCTTCTTGCAGTTAAAGAAG
AATTGCAGAAACCATGCAATATACTTGGGAAAGATTCCAAAAATAAATTTTTTATTATTTCTCTTTTAAGGAAAT
ACCCCTAATGTGCCACCTGCTGCTATCACCACAAATTAACCTCAATCTCTATGTGGACAGAGGATGATTTCTGCC
AATATGGAAGAGCTTTTTTCTCACTGTAGGCCTCAAGAAAGTTAGGGTAATGTATTTGTTATTCTTCTGACG
GTACAAAGAGCTTGCAGTTCTCACCTCTGACTACCAGTAGCTTTGTTGAGTTTTGAAATAATACTTACATTTTC
CAAAGGCAAAATCTCATTCTGCAAGGAGATTGTGGCACCATCCTGTTTGACTCTCAGAAACCTCTTGTAATTCTGA
TGTA AAAA ACTGTAGAATGAAGATGAGAAAATTCTCGCAATGAGTGGATCATGCAACTGTAAATTAGAACAATCA
GATTTAAACCAATTCCGCAGTCTTCTATATCTTTGTAAAAGACAAATCCTTGATGTTGTCTGTGTGCAACCTTTT
CATAAACTCTGGTTTTATGACTAGTACAAACCACCAAAAAAGCCATGTGATCAATAGTCTGTGCTGTTTATAAC
ATGCTGTGGTTGAGCCATCTTGTTTATAAATAATAGAGCTCTCCTGAATTTGTGCATAGACTTCTTGGTTCTGG
CTTTTGTTTTTTGTATCAAGAGATTGTGATATAAAACAGCAGAAGATAAATGGAAACCTTCCATTTTAACCTTACG
TTGTTTCTGGGGTAATGTTAGAACCTTGAAAGATGCATTCAAAGACTGTATCTTATTTTGCCCTTGGCTATTAGT
GTCTCACATATGTGTGTAATGTTTTCTACCTTCTTTTTGCTCAGCAAAGGCAAGCAAGTAAATATATTTGCT
AAGTGATTAGTGATGCACATTTGGGGCTAGATTTTTTTGGTACTTTTTATGTAAAGAAAAGTGGATTTTGCAGTAA
GGGATTGGCATGAGCAGGCGTCAGAATCACAATCATGATTTTCTACTTGAATAATTACAATTCAGAAGGTATCTG
GATAAATAGATACATGTCTAGTGAACAATTTGTAACAATAACAGGTAAGGATCAGGAAATTCAGTATTCAGTTT
TCAGATTTGCCAGAATGATGAAAGTATTTGAACATGTGTGTTTGTCTTATATAATTGTATTGAGTGGATTGTT
TGACTGGGAAATCTGGGCTAGAATAGGAAACAGAAGATACTGACTTCTACCCTAATAGATGGGCCCAATTTAGC
AAAGATAAACTGACTTTATTTTGTCTCTTTTATATTAACCTTAATAAATCTGGAGTTAGGCTCTCAAGAGGAC
AGAGGGACTGTCTGGCAATGGCCAGCCAGACCTTTACTGCCAAAGAACCCATTTCAATATTGCGTTCCACTGATTG
AGATTGATTACAGATTTTGCCTGTAGATGAGCGTATGTCTCAGTGTGCCCAAGCCCCAGGGATTTCTCATT
TGTTCAAATGTCTAGTGATTTACCTTAATCATTGCAACAATTATGCTTATGAAGTTTACTTACAAACAAGCAA
CTGAGTCACTTTATTTTCTTTAGTGTAGTATGTGAAGGCACTGGTTCAACAGGATGGCTCCAGAACTGTGTTTTT
CTAATGTTTGGTAAGGGCTAGTGAGAATTTAATGATATGGTGAAGAAAAATATATCTGTATAATTAATTTATT
ATATTGGTGTATGGGCTGTGAGTTACCTTTTAGTGGTCATTTGTCAATTCATAACAACTATGCATTTTGGTTCA

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FIGURE 4163B

CTGTGATGATGATCTATATTTAGTGACTGCAACATGTTTATACCACTGATTCAAATTCATCCATGATGAAGTTA
TACAAATAATGCATATATTGATAACTTTTATTGCAAAAATGTAAATTTAAAACTTGTATAATGTTCTTGTGCTTT
TTAAAATAAAATATATGTGTATATTT

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FIGURE 4164

MAHMLQILLTVDTGLPLAQVQEDSEEAHSAASSFFAEISQYTSIGCDIPGWYLVVSLKNGITPYLRCAALFFHY
LLGVTPPEELHTNSAEGEYSALCSYLSLPTNLFLLFQEYWDTVRPLLQRWCADPALLNCLKQKNTVVRYPRKRNS
LIELPDDYSCLLNQASHFRCPRSADDERKHPVLCLFCGAILCSQNICCQEIVNGEEVGACIFHALHCGAGVCIFL
KIRECRVVLVEGKARGCAYPAPYLDEYGETDPGLKRGNPLHLSRERYRKLHLVWQQHCIEEIARSQETNQMLFG
FNWQLL

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FIGURE 4165

CCTTTTGGCTCTCTGACCAGCACCAATGGCGGTTGGCAAGAACAAGAGCCTTACGAAAGGCGGCAAAAAGGGAGCC
AAGAAGAAAGTGGTTGATCCGTTTTCTAAGAAAAATTGGTATGATACGAAAGCACCTGCTATGTTCAATATATGA
AATATTGGAAAGATGCTGGTCACCAGGACCCAAGGAACCAAAATTGCATCTGATGATCTCAAGGGTCATGTGTTT
GAAGTGAGTCTTGCTGATTTCAGAAATGATGAAGTTGCATTTAGAAAATTCAAGCTGATTACTGAAGATGTTTCAG
GGTAAAAACTGCCTGACTAACTTCCATGGCATGGATCTTACCCGTGACAAAACGTGTTCCATGGTCAAAAAATGG
CAGACAATGATTGAAGCTCATGTTGATGTCAAGACTACCGATGGTTACTTGCTTCATCTGTTCTGTGTTGGTTTT
AATAAAAAACGCAACAATCAGATATGGAAGACCTCTTATGCTCAGCACCAACAGGTCCGCCAAATCCGGAAGAAG
ATGATGGAAATCACGACCCGAGAGGTGCAGACTAATGACTTGAAAGAAGTGGTCAATAAATTGATTCCAGACAGC
ATTGGAAAAGACATAGAAAAGGCTTGCCAATCTATTTATCCTCTCCGTGATGTCTTCGTTAGAAAAGTAAAAATG
CTGAAGAAGCCCAAGTTTGAATTGGGAAGGCTCATGGAGCTTCATGGTGAAGGCAGTAGTTCTGGAAAAGCCACT
GGGGATGAGACAGGTGCTAAAGTTGGACGAGCTGATGGATATGAACCACCAGTCCAAGAATCTGTTTAAAGTTCA
GACTTCAAATAGTGGCAAATAAAAAGTGCTATTTGTGA

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FIGURE 4166

WRLARTRALRKAARKREPRRKWLIRFLRKIGMIRKHLCSYIENIGKMLVTRTQGTKIASDDLKGHVFEVSLADLQ
NDEVAFRKFKLITEDVQGKNCLTNFHGMDLTRDKTCSMVKKWQTMIEAHVDVKTTDGYLLHLFCVGFNKKRNNQI
WKTSYAQQQVRQIRKKMMEITTREVQTNDLKEVVNKLIPDSIGKDIEKACQSIYPLRDVFVRKVKMLKKPKFEL
GRLMELHGEGSSSGKATGDETGAKVGRADGYEPPVQESV

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FIGURE 4167A

CACAACCGTGACAGACTGCCATTCTCTGAGTCTCTTCTGGCCATGGGGCCCCGGAGCCGTGAGCGTCGGGCAGGCG
CGGTACAGAACACCAACGACAGCAGCGCCCTCAGCAAGCGTTCCCTGGCCGCGCGCGGGTACGTGCAGGACCCCT
TTGCCGCGTTGCTGGTTCCGGGCGCGGCGCGCCGCGCACCCTCATTACCGAGGCTACTACGTCCGCGCACGCG
CCGTGAGGCACTGCGTGCGCGCTTTTTTGGAGCAGATTGGCGCGCCCCAGGCCGCGCTTCGCGCGCAGATCTTGT
CTCTCGGCGCTGGCTTCGACTCGCTCTATTTTCGCTTAAAAACCGCGGGCCGCTGGCCCCGGGTGCAGTCTGGG
AGGTGGATTTTCCGGACGTGGCGCGGCGCAAAGCAGAAAGGATTGGAGAGACGCCAGAGCTGTGCGCGTTAACCG
GGCCTTTCGAGAGGGGGAGCCCCGCGTCCGCGCTGTGCTTGGAGAGCGCAGACTACTGCATCCTGGGTCTGGACT
TGCGGCAGCTCCAGCAGTGGAGGAGGCCCTGGGCGCGCGGGGCTCGACGCAGCCTACCCACTCTGCTCCTGG
CCGAGGCGGTGCTGACCTACCTCGAGCCGGAGAGTGCCGCGGCCCTCATCGCCTGGGCAGCCAGCGTTTTCTTA
ATGCCCTTTTCGTGGTCTATGAGCAGATGAGGCCCAAGACGCCCTTGGCCAGTTTCATGCTGCAACATTTTCGGC
AGCTAAACTCCCCCTGCATGGCCTGGAGCGTTTTCTGACGTGGAGGCGCAGCGGCGCCGCTTCTTCAAGCTG
GCTGGACCGCTGCGGTGCGTGGACATGAATGAATCTATCACTGCTTTCTTCCGCGAGAAGACGCGCGGG
TGGAAATATTGAACCTTTGACGAATTTGAGGAGTGGCATCTGAAGTGCGCCCATTTATTCTGTCAGCTT
CTAGGGGAGACACCCTCTCCACACCCTAGTGTTCCTATCCTCAGAGGCATTTCTCGCTAAATCCTGCTTCGC
CTTCAGGGGTATTCCCTGCCAGCGTAGTCAGTAGCGAGGGCCAGGTCCCAAACCTGAAGAGATATGGCCACGCCCT
CTGTCTTCTTGAGCCAGACGTTATTCTCAGTGCAGGAGGATTTGGAGAGCAGGAGGGGCGGCACTGCCGAGTGA
GCCAGTTTCACTTGCTCTCAAGAGATTGTGACTCTGAATGGAAAGGCAGCCAAATAGGCAGTTGTGGGACTGGAG
TTCAGTGGGATGGACGCCTTTATCACACCATGACAAGACTCTCAGAGAGTCGGGTCTGTTCTGGGAGGGAGAC
TGTCCCCAGTAAGTCCAGCCTTGGGGGTCTCCAGCTTCATTTTTTAAAGAGTGGGATAATAACACTGAGGACC
TGAAAGTGACAATAACAAAGGCTGGCCGAAAGGATGATTCCACTTTGTGTTGTTGGCGGCATTCAACAACAGAAG
TGTCCTGTCAGAATCAGGAATATTTGTTTGTGTATGGGGGTGAAAGCGTGGTGGAACTGTACTAAGTGACTGGC
ATTTCTCCATGTAGGGACAATGGCTTGGGTGAGGATCCAGTGGAGGGAGAAGTACCTGAAGCCCCGCATTCTC
ACAGTGCCTGCCTTGGCAAGGGGGAGCCCTTATTGCTGGAGGTCTCGGGGCTTCTGAGGAGCCATTGAACTCTG
TGCTCTTTCTGAGACCAATCTCTTGTGGATTCTCTGGGAGTCAGTAGACATCCAGCCTCCCATTAACCCAAAGT
ACTCCACACAGCTCATGTGCTCAATGGAAAGCTGTTACTGGTTGGAGGGATCTGGATTCACTTCTCTCATTTC
CTGGAGTGAAGTGTGATCAATTTGACTACAGGATTGAGCTCTGAGTATCAGATTGACACAACATATGTGCCATGGC
CATTAAATGTTACACAACCATACTAGTATCCTTCTTCTGAAAGAGCAACAGCTCCTGCTCCTTGGAGGTGGTGGGA
ACTGCTTTTTCTTTGGTACCTACTTCAACCCCATACAGTACATTAGACCTTTCTTCTTAAAGTGCTGGGCAGT
AAGGACTGGACTAATATTGAGGACCCACTAAAGTAGACAATAAAGTTTTCCACAAATAGGATGACCCCTTAGCTA
TAGATACTGCCACTCCTCCTTTCCCATCCTTTTTTTCCCTTAGCACTATTAGTGCAAAAAGTGAAAAAGTTG
GTAAATAGGTAAATACCTAGAAACAATCACTACAGAAAACAGCTGAAGACAGTGGCCATGCAGTCCGAGAGGA
GTAGTGGTCTGCCTCTAATTTTCTAATCTAAGTTTCGTTTATTGAGTTACAGTGGTCTTTAGTAAAGTAAACAAT
TTCCCAATCCCAGGCCTTGTGATTTGAGATGGTACCTTAGAAAAAGTTACACGCAGTTCCGTGGTTGAATATATT
TGAGATGGTACCTTAGAAAAAGTTTACGCAGATCCTTGGTTGAATATAGTTGAGGGAGCGTAGTATTGACAATT
CTTCATGTAGGAAACCTGAAATGAACACAGTCACAGTTTGATTAAACATTGTCCTGTTTGTGCAACAGAAAAC
TCGGATAGTTTTTAACAACAGGAAACACTTGTAGGACTTCTTTTACCAACATACTTTTTAAATGTTTTGCTATTGG
TTCCATATTTATTTAGATTTATAAGTGTCAATAAAGCAAACCTTTTGATGCCTCAATTCATTTTGCACGGGGTATA
ATAATGTTTTGTTCCAGATATACTCTCCACCTTTCACTGTTCTGTGCTCCAAGAGGCTGACCTTTATGGGCTGCA
TCAAGGAGCTCTCTTTACTTTTTGGTTGAGTTCCACCAGTCAGAGGCACCAGAGGGGAATGGGGGCAAAAAGAAG
AGTGAGAGTGAGTTGGTATTTATTTCCCAATCTTCCCCTGTTGGTTTGCAAGTTGGCAGTGGCAGCATTCTCTG
TCAAAGGCTACAGCTCCTGCCGTGTAATCCTTTCTGAAAGACAGAGTTCTAATCTGCATCATCCAGGTTTCAG
TAATTGTTCTTTACTTTCACCTTTTCAGGCCTAGGAGTTGTGATGGCTCTTTGCTAGACCTGAAGTGTACTGTCC
AATGTGGTAGCTATTGACAACATGTGACTATTTAAACGAATTAATAAATTCAGTGGCTTAGTCACATTGACCACA
TTTTAAGTGCTTAATAACTATGTGTGGCTTTGGCTACTGTATTAGACAATGTAGATGTAGAACATTTTCATCGTTA
CAGAAATTTCTACTGGACACTGCTGACTGGATATCTTGACTTGGTTTCCCTTAACCCTACTCAGCCCTTATAGT
TAGCATCCCATTAACCTCAATTATCCCTTTTAAATGGGAATCTGTTGCCTAGTGAGCCATGTGAGATCAATGAAA
TAGCTATTATCTTAAATTTGAGCCTTAATTTGTATCTAAATTATGCATACCTTGTGAAATATACACCTCAA
AAAATGTAGTGGCTTTGGTGGTAATAAGTGTATTACTTTAGTATTTCTTCTTAGTCCTAGAAACCTTAGTAGTTT

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FIGURE 4167B

TCATTCTACAAGTGCCTAAATGATTATTATGAACCATCATTGATGACAAATTGCATCCTTTATTTCTATTAAATTT
TGCATATAAATGGATGTGAAAGGTGATTAATATAAAAAACCAAGTAGCAAACACAAACCTAAGTGTATGGAGAGGA
CAGTCTTGGCTCTGTTAGATGAAGCCTCCCCGGGGGAGACCAGCTGAATGAGGGTTGTGGTATAGGCTGGGCATG
GTGGCTCACGCCTATAATTCCAGCACTTTGGGAGGCCAAGACAGAAGGATCACTTAAAGCCAGGAGTTTAAGACC
AGCCCAGGCAACAAAGTCAGATCCCCATCTCTACAAAAAAATAAGTAGGCACGGTGGTGTGTGCTTGTAGTCTTG
GATACTCTGGAGGCTGAGGTGATAGTGAGCTGTGATTGTGCCACTGCACTCCTGCCTGGTTGACAGAGTGAGACC
CCGTCTCTTAAAAAGAAAAAAAAAAAAAGGTTGTTGTCCAACCTTCAGCTTTCCTGAGACTTTGTAAGAGCCATTTT
TAGGGAAAGCATTGGTTATGGCTATGACTGAGTCCTGGGAAACAGGGCTTATTACAGCTGGGAAGACATCTGGCA
AGGCGATCAGTGGGCCAGGTAGTAGAAAACCTGGCAGGGAATATGATCAGCAGGAGAAAATGGCTGTTCTGTATTT
CCTGTTTCTAAGTTTACTACAGCACACCCCAGCTTTCAGGAGCAGATAAAAGCAGAACACTGTGATGAGGCCAGG
CGCAGTGGCACATGCCTTGATCCCAGCACTTTGGGAGGCCAAGGCTGGCAGATCACTTGAACCTCAGGAGTTGGAG
ACCAGCCTGGCCAATATGGTGAAACTCCGTCTCTACCCAAAAAAAAAAAAAAAAAAAA

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FIGURE 4168

GAATGATCCACGAACTGCTCTTGGCTCTGAGCGGGTACCCTGGGTCCATTTTCACCTGGAACAAGCGGAGTGGCC
TGCAGGTATCGCAGGACTTCCCTTTCCCTCCACCCAGTGAGACCAGTGTCTGAATCGACTCTGCCGGCTCGGCA
CAGACTATATTCGCTTCACTGAGTTCATTGAACAGTACACGGGCCATGTGCAACAGCAGGATCACCATCCATCTC
AACAGGGCCAAGGTGGGTACATGGAATCTACCTGCGGGCCTTCTGCACAGGGCTGGATTCTGTTTTGCAGCCTT
ATCGCCAAGCACTGCTTGATTGGGAACAAGAGTTCCTGGGTGATCCCCATCTCTCCATATCACATGTCAACTACT
TCCTAGACCAGTTCAGCTTCTTTTTCCCTCTGTGATGGTGTAGTAGAACAAATTAAAAGTCAAAAGATTTCATG
GTTGTCAAATCCTGGAACAGTCTACAAACACAGCTGTGGGGGGTTCCTCTGTTGGAAGTGCAGTGGAAAAA
TCCTGGCCGTTTGTATGGGGTTCATGTATAAACAGCTCTCAGCCTGGATGCTCCATGGACTCCTCTTGGACCAGC
ATGAAGAATTCTTTATCAAACAGGGGCCATCTTCTGGTAATGTCAGTGCCAGCCAGAGAGGACGAGGAGGATC
TGGGCATTGGGGGACTGACAGGAAAACAACAGAGAACTGCAGGACTTGCCTGATTGAGGAAGAGAACATGC
TGGCACCATCTCTGAAGCAGTTTTCCCTACGAGTGGAGATTTTGCCATCCTACATTCCAGTGAGGGTTGCTGAAA
AAATCCTATTTGTTGGAGAATCTGTCCAGATGTTTGAGAATCAAATGTGAACCTGACTAGAAAAGGATCCATTT
TGAAAAACCAGGAAGACACTTTTGCTGCAGAGCTGCACCGTCTCAAGCAGCAGCCACTCTTCAGCTTGGTGGACT
TTGAACAGGTGGTGGATCGCATTTCGAGCACTGTGGCTGAGCATCTCTGGAAGTTGATGGTAGAAGAATCCGATT
TACTGGGTGAGCTGAAGATCATTAAAGACTTTTACCTTCTGGGACGTGGAGAAGTGTTCAGGCCTTCATTGACA
CAGCTCAACACATGTTGAAAACACCACCCACTGCAGTAAGTGAAGCATGATGTGAATGTGGCCTTTCAACAGTCAG
CACACAAGGTATTGCTAGATGATGACAACCTTCTCCCTCTGTTGCACTTGACAATCGAGTATCACGGAAAGGAGC
ACAAAGCAGATGCTACTCAGGCAAGAGAAGGGCCTTCTCGGGAAGTCTCTCCCGGGAAGCCCTGCATCTGGCT
GGGCAGCCCTAGGTCTTTCTTACAAAGTACAGTGGCCACTACATATTCTCTTACCCAGCTGTCTTGGAAAAGT
ACAATGTTGTTTTTAAGTACTTACTGAGTGTGCGCCGGGTGCAAGCTGAGCTGCAGCACTGCTGGGCCCTACAAA
TGCAGCGCAAGCACCTCAAGTCGAACCAAGCTGATGCAATCAAGTGGCGCCTAAGAAATCACATGGCATTITTTGG
TGGATAATCTTCAGTACTATCTCCAGGTAGATGTGTTGGAGTCTCAGTTCCTCCAGCTGCTTCATCAGATCAATT
CTACCCGAGACTTTGAAAGCATCCGATTGGCTCATGACCACTTCTGAGCAATTTGCTGGCTCAATCCTTTATCC
TATTGAAACCTGTGTTTCACTGCCTGAATGAAATCCTAGATCTCTGTACAGTTTTTGTTCGCTGGTCAGTCAGA
ACCTAGGCCCCACTGGATGAGCGTGGAGCCGCCAGCTGAGCATTCCTCGTGAAGGGCTTTAGCCGCCAGTCTTCAC
TCCTGTTCAAGATTCTCTCCAGTGTTCGGAATCATCAGATCAACTCAGATTTGGCTCAACTACTGTTACGACTAG
ATTATAACAAATACTATACCCAGGCTGGTGGAACTCTGGGCAGTTTCGGGATGTGA

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FIGURE 4169

MIHELLLALSGYPGSIFTWNKRSGLQVSQDFPFLHPSETSVLNRLCRLGTDYIRFTEFIEQYTGHVQQQDHHPSQ
QQQGGLHGIYLRAFCTGLDSVLQPYRQALLDLEQEFGLGDPHLSISHVNYFLDQFQLLFPSVMVVVEQIKSQKIHG
CQILETVYKHSCGGLPPVRSALKILAVCHGVMYKQLSAWMLHGLLLDQHEEFFIKQGPSSGNVSAQPEEDEDL
GIGGLTGKQLRELQDLRLIEEENMLAPSLKQFSLRVEILPSYIPVRVAEKILFVGESVQMFENQNVNLTRKGSIL
KNQEDTFAAELHRLKQQPLFSLVDFEQVVDRIIRSTVAEHLWKLMVEESDLLGQLKIIKDFYLLGRGELFQAFIDT
AQHMLKTPPTAVTEHDVNVAFQQSAHKVLLDDDNLLPLLHTIEYHGKEHKADATQAREGPSRETSPREAPASGW
AALGLSYKVQWPLHILFTPAVLEKYNVVKYLLSVRRVQAELOHCWALQMQRKHLKSNQTDIAKWRLRNHMAFLV
DNLQYYLQVDVLESQFSQLLHQINSTDFESIRLAHDHFLSNLLAQSFILLKPVFHCLEILDLCFSFCSLVSON
LGPLDERGAAQLSILVKGFSRQSSLLFKILSSVRNHQINSDLAQLLLRLDYNKYTTQAGGTLSFGM

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FIGURE 4170A

CGTTGTTTGGCGTGTTTTTTTTTTTGTGTTTTTGTCACTGCCTGCCTGGGTCTGCCCCGAGGTCTCCATCCTCGGT
TTCCCTGTCTTGCCCCGGGCCCTGGGAGTGCTCTGGAAGGCTGCGCAGTATTGGAGGGGACAGAATGACCTTCC
GGCCTTGAGTCCCTGGGGAGCAGATGGACCTACTGGAAGTCAGTTGGATTGAGATTTCTCTCAGCAAGATACTC
CTTGCCCTGATAATTGAAGATTCTCAGCCTGAAAAGCCAGGTTCTAGAGGATGATTCTGGTTCTCACTTCAGTATGC
TATCTCGACACCTTCTAATCTCCAGACGCACAAAGAAAATCCTGTGTTGGATGTTGTGTCCAATCCTGAACAAA
CAGCTGGAGAAGAACGAGGAGACGGTAATAGTGGGTTCATGAACATTTGAAAGAAAACAAGGTTGCAGACCCTG
TGGATTCTTCTAACTTGGACACATGTGGTTCCATCAGTCAGGTCATTGAGCAGTTACCTCAGCCAAACAGGACAA
GCAGTGTCTGGGAATGTCAGTGAATCTGCTCCTGCTGTGGAGGAAGAGAAGGGAGAAGAGTTGGAACAGAAGG
AGAAAGAGAAGGAAGAAGATACTTCAGGCAATACTACACATTCCCTTGGTGCTGAAGATACTGCCTCATCACAGT
TGGGTTTTGGGGTTCTGGAACCTCTCCAGAGCCAGGATGTTGAGGAAAATACTGTGCCATATGAAGTGGACAAAG
AGCAGCTACAATCAGTAACCACTCTGGTTATACCAGGCTGTCTGATGTGGATGCTAATACTGCAATTAAGC
ATGAAGAACAGTCCAACGAAGATATCCCCATAGCAGAACAGTCCAGCAAGGACATCCCTGTGACAGCACAGCCCA
GTAAGGATGTACATGTTGTAAAAGAGCAAAATCCACCACCTGCAAGGTGAGAGGACATGCCTTTTAGCCCCAAAG
CATCTGTTGCTGCTATGGAAGCAAAAGAACAGTTGTCTGCACAAGAACTTATGAAAGTGGACTGCAGATTGAGA
AGTCACCAGAGCCTGAGGTTTTGTCAACTCAGGAAGACTTGTGTTGACCAGAGCAATAAAACAGTATCTTCTGATG
GTTGCTCTACTCCTTCAAGGGAGGAAGGTGGGTGTTCTTTGGCTTCCACTCCTGCCACCCTCTGCATCTCCTGC
AGCTCTCTGGTCAGAGGTCCCTTGTTCAGGACAGTCTTTCCACGAATTCTTCAGATCTTGTGCTCCTTCTCCTG
ATGCTTTCCGATCTACTCCTTTTATCGTTCTTAGCAGTCCCACAGAGCAAGAAGGGAGACAAGATAAGCCAATGG
ACACGTCAGTGTATCTGAAGAAGGAGGAGAGCCTTTTCAGAAGAACTTCAAAGTGGTGAACCAGTGGAGTTAG
AAAACCCCCCTCTCCTGCCTGAGTCCACTGTATCACCACAAGCCTCAACACCAATATCTCAGAGCACACCAGTCT
TCCCTCCTGGGTCACTTCTATCCCATCCCAGCCTCAGTTTTCTCATGACATTTTTATTCTTCCCCAAGTCTGG
AAGAACAATCAAATGATGGGAAGAAAGATGGAGATATGCATAGTTCATCTTTGACAGTTGAGTGTCTAAACTT
CAGAGATTGAACCAAGAATTCCTTGAGGATCTTGGGCTATCTTTGACAGGGGATTCTTGCAAGTTGATGCTTT
CTACAAGTGAATATAGTCAGTCCCCAAGATGGAGAGCTTGAGTTCTACAGAATTGATGAAGATGGAGAAAACA
CACAGATTGAGGATACGGAACCCATGTCTCCAGTTCTCAATTCTAAATTTGTTCTGCTGAAAATGATAGTATCC
TGATGAATCCAGCACAGGATGGTGAAGTACAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG
CCAGGGATGACATTAGTATTTTAGCCACTGGTTGCAAGGGCAGAGAAGAAACGGTAGCAGAAGATGTTTGTATTG
ATCTCACTTGTGATTGCGGGAGTCAGGCAGTTCCGTCACCAGCTACTCGATCTGAGGCACTTTCTAGTGTGTTAG
ATCAGGAGGAAGCTATGGAATTAAGAACACCATCCAGAGGAGGGGTCTTCAGGGTCTGAGGTGGAAGAAATCC
CTGAGACACCTTGTGAAAGTCAAGGAGAGGAAGTCAAAGAAGAAAATATGGAGAGTGTCCGTTGCACCTTTCTC
TGACTGAAACTCAGTCCCAAGGGTTGTGTCTTCAAAGGAAATGCCAAAAAAGAAATGCTCAGAAGCTATGGAAG
TTGAAACCAGTGTGATTAGTATTGATTCCCTCAAAGTTGGCAATACCTTGACCAAGAAATGGAACATAAGGAAC
AGGAAGCTTGGGAAGAAGCTACTTCAGAGGACTCCAGTGTGTGTCATTGTAGATGTGAAAGAGCCATCTCCAGAG
TTGATGTTTCTTGTGAACCTTTGGAGGGAGTGGAGAAGTGTGTCAGATTCCCAGTCAAGGGAGGATATTGCTCCAG
AAATAGAACCATGTGCTGAGAATAGATTAGACACCAAGGAAGAAAAGAGTGTAGAATATGAAGGAGATCTGAAAT
CAGGGACTGCAGAAACAGAACCTGTAGAGCAAGATTCTTCACAGCCTTCCCTTACCTTTAGTGAGAGCAGATGATC
CTTTAAGACTTGACCAGGAGTTGCAGCAGCCCCAACTCAGGAGAAAAACAAGTAATTCATTAACAGAAGACTCAA
AAATGGCTAATGCAAAGCAGCTAAGCTCAGATGCAGAGGCCAGAAAGCTGGGGAAAGCCCTCTGCCCATGCCTCAC
AAAGCTTCTGTGAAAGTTCTAGTGAAACCCCATTTCAATTTCACTTTGCCTAAAGAGGTGATATCATCCCACCAT
TGACTGGTGCACCCACCTCTTATTTGGGCACCTAAAATTTGGAGCCCAAGAGACACAGTACTCTATTGGTATTA
GCAACTATCCAGAAAGCACCATAGCAACCAAGTGTATGTCTGAAAGCATGGTGGAGACCCATGATCCCATAC
TTGGGAGTGGAAAAGGGGATTCTGGGGCTGCCCCAGACGTGGATGATAAATTATGTCTAAGAATGAAACTGGTTA
GTCCTGAGACTGAGGCGAGTGAAGAGTCTTTGCAAGTTCAACCTGGAAAAGCCTGCAACTGGTGAAGAAAAAATG
GATCTACTGCTGTTGCTGAGTCTGTTGCCAGTCCCCAGAAGACCATGTCTGTGTTGAGCTGTATCTGTGAAGCCA
GGCAAGAGAATGAGGCTGAAGTGAGGATCCCCCACCACACCCATCAGGGGGAACTTGCTCCACTTTCCAAGTT
CTCAAGGAGAAGAGGAGAAAGAAAAATTTGAGGGTGACCATACAATCAGGCAGAGTCAACAGCCTATGAAGCCCA
TTAGTCCCTGTCAAGGACCTGTTTCTCTGCTTCCCAGAAGATGGTCATACAAGGGCCATCCAGTCTCAAGGAG
AGGCAATGGTGACAGATGTGCTAGAAGACCAGAAAGAAGGACGGAGTACTAATAAGGAAAAATCTAGTAAGGCCT

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FIGURE 4170B

TGATTGAAAGGCCAGCCAAAATAACATAGGAATCCAAACCATGGAGTGTTCCTTGAGGGTCCCAGAACTGTTT
CAGCAGCAACCCAGACTATAAAGAATGTGTGTGAGCAGGGGACCAGTACAGTGGACCAGAACTTTGGAAAGCAAG
ATGCCACAGTTCAGACTGAGAGGGGGAGTGGTGAGAAAACCAAGTCAGTGCTCCTGGGGATGATACAGAGTCGCTCC
ATAGCCAGGGAGAAGAAGAGTTTGATATGCCCTCAGCCTCCACATGGCCATGTCTTACATCGTCACATGAGAACAA
TCCGGGAAGTACGCACACTTGTCACTCGTGTCTATTACAGATGTGTATTATGTGGATGGAACAGAAGTAGAAAGAA
AAGTAACTGAGGAGACTGAAGAGCCAATTGTAGAGTGTGAGGAGTGTGAACTGAAGTTTCCCTTTCAGACTG
GGGGCTCCTCAGGTGACCTGGGGGATATCAGCTCCTTCTCCTCCAAGGCATCCAGCTTACACCGCACATCAAGTG
GGACAAGTCTCTCAGCTATGCACAGCAGTGGAAAGCTCAGGGAAAGGAGCCGGACCACTCAGAGGGAAAACAGCG
GGACAGAACCCGCAGATTTTGCCTTACCCAGCTCCCGAGGAGGCCAGGAAAACCTGAGTCCTAGAAAAGGGGTCA
GTCAGACAGGGACGCCAGTGTGTGAGGAGGATGGTGATGCAGGCCTTGGCATCAGACAGGGAGGGAAGGCTCCAG
TCACGCCCTCGTGGGCGTGGGCGAAGGGGCGCCACCTTCTCGGACCACTGGAACCAGAGAAACAGCTGTGCCTG
GCCCCTTGGGCATAGAGGACATTTACCTAATTGTCAACAGATGATAAATCCTTCAGCCGTGTCTGCCCCGAG
TGCCAGACTCCACCAGACGAACAGATGTGGGTGCTGGTGCTTTGCGTCGTAGTGACTCTCCAGAAATTCCTTTCC
AGGCTGCTGCTGGCCCTTCTGATGGCTTAGATGCCCTCCTCCTCAGGAAATAGCTTTGTAGGGCTCCGTGTGTAG
CCAAGTGGTCATCCAATGGCTACTTTTACTCTGGGAAAATCACACGAGATGTCGGAGCTGGGAAGTATAAATTGC
TCTTTGATGATGGGTACGAATGTGATGTGTGGGCAAAGACATTCTGTTATGTGACCCCATCCCGCTGGACACTG
AAGTGACGGCCCTCTCGGAGGATGAGTATTTCACTGCAGGAGTGGTGAAAGGACATAGGAAGGAGTCTGGGGAAC
TGTAATACAGCATTGAAAAAGAAGGCCAAAGAAAGTGGTATAAGCGAATGGCTGTCATCTGTCTTGGAGCAAG
GAAACAGACTGAGAGAGCAGTATGGGCTTGGCCCTATGAAGCAGTAACACCTCTTACAAAGGCAGCAGATATCA
GCTTAGACAATTTGGTGGAAGGGAAGCGGAAACGGCGCAGTAACGTCAGCTCCCCAGCCACCCCTACTGCCTCCA
GTAGCAGCAGCACAAACCCCTACCCGAAAGATCACAGAAAGTCCTCGTGCTCCATGGGAGTTCTCTCAGGCAAAA
GAAAACCTTATCACTTCTGAAGAGGAACGGTCCCCTGCCAAGCGAGGTGCAAGTCTGCCACAGTAAAACCTGGTG
CAGTAGGGGCAGGAGAGTTTGTGAGCCCTGTGAGAGTGGAGACAACACCGGTGAACCTCTGCCCTGGAAGAGC
AGAGAGGGCCTTTGCCTCTCAACAAGACCTTGTTTCTGGGCTACGCATTTCTCCTTACCATGGCCACAACCAAGT
ACAAGTTGGCCAGCCGCTCCAACTGCCAGATGGTCCTACAGGAAGCAGTGAAGAAGAGGAGGAATTTTGGAAA
TTCTCTCTTTCAACAAGCAGTATACAGAATCCAGCTTCGAGCAGGAGCTGGCTATATCCTTGAAGATTTCAATG
AAGCCAGTGTAACACAGCTTACCAGTGTCTTCTAATTGCGGATCAGCATTGTGCAACCCGGAAGTACTTCTGT
GCCTTGCCAGTGGGATTCCTTGTGTGTCTCATGTCTGGGTCCATGATAGTTGCCATGCCAACCAGCTCCAGAACT
ACCGTAATTATCTGTTGCCAGCTGGGTACAGCCTTGAGGAGCAAAGAATTCTGGACTGGCAACCCCGTGAATACT
CTTTCCAGAATCTGAAGGTACTCTTGGTATCAGACCAACAGCAGAACTTCTGGAGCTCTGGTCTGAGATCCTCA
TGACTGGTGGTGCAGCCTCTGTGAAGCAGCACCATTCAAGTGCCCATAAACAAAGATATTGCTTTAGGGGTATTG
ATGTGGTGGTGACGGACCCCTCATGCCCAGCCTCGGTGCTGAAGTGTGCTGAAGCATTGCAGCTGCCTGTGGTGT
CACAAGAGTGGGTGATCCAGTGCCTCATTGTTGGGGAGAGAATTGGATTCAAGCAGCATCCAAAATATAAACACG
ATTATGTTTTCTCACTAAAGATACTTGGTCTTACTGGTTTTATTCCCTGCTATCGTGGAGATTGTGTTTTAACCA
GTTTTAAATGTGTCTTGTGTGTAAGTGGATTCTTGCATGGATCTTGTATATAGTTTTATTGCTGAACTTTTAT
GATAAAATAAATGTTGAATCTCTTTGGTTGTAGTAACTGGG

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FIGURE 4171

MDPTGSQLDSDFSQQDTPCLIIEDSQPESQVLEDDSGSHFSMLSRHLPNLQTHKENPVLDVVSNEQTAGEERGD
GNSGFNEHLKENKVADPVDSSNLDTCGSISQVIEQLPQPNRTSSVLGMSVESAPAVEEEKGEELEQKEKEKEEDT
SGNTTHSLGAEDTASSQLGFGVLELSQSQDVEENTVPYEV DKEQLQSVTTNSGYTRLSDVDANTAIKHEEQSNED
IPIAEQSSKDIPVTAQPSKDVHV VKEQNPPPARSEDMPFSPKASVAAMEAKEQLSAQELMESGLQIQKSPEPEVL
STQEDLFDQSNKTVSSDGCSTPSREEGGCSLASTPATTLLHLLQLSGQRSVLVQDSLSTNSSDLVAPSPDAFRSTPF
IVPSSPTEQEGRQDKPMDTSVLSEEGGEFFQKKLQSGEPVELENPPLLPESTVSPQASTPISQSTPVFPFPGSLPI
PSQPQFSDHIFIPSPSLEEQSN DGKKDGMHSSSLTVECSKTSEIEPKNSPEDLGLSLTGDSCKLMLSTSEYSQS
PKMESLSSHRIDEDGENTQIEDTEPMSPVLNSKFVPAENDSILMNPAQDGEVQLSQND DKTGDDTDTRDDISIL
ATGCKGREETVAEDVCIDLTCDSGSQAVPSPATRSEALSSVLDQEEAMEIKEHHPEEGSSGSEVEEIPETPCESQ
GEELKEENMESVPLHLSLTETQSQGLCLQKEMPKECSEAMEVETSVISIDSPQKLAILDQELEHKEQEAWEEAT
SESSSVVIVDVKEPSRVDVSCEPLEGVEKCSDSQSWEDIAPEIEPCAENRLDTKEEKSVEYEGDLKSGTAETEP
VEQDSSQPSLPLVRADDPLRLDQELQQPQTQEKTSNSLTEDSKMANAKQLSSDAEAQKLGKPSAHASQSFCSSS
ETPFHFTLPKEGDIIPPLTGATPPLIGHLKLEPKRHSTPIGISNYPESTIATSDVMSESMVETHDPILGSGKGD
GAAPDVDDKLCRLMKLVSPETEASEESLQFNLEKPATGERKNGSTAVAESVASPQKTM SVLSCICEARQENEAR
EDPPTTPIRGNLLHFPSSQGEKEKELEGDHTIRQSQQPMKPI SPVKDPVSPASQKMVIQGPSSPQGEAMVTDVL
EDQKEGRSTNKENPSKALIERPSQNNIGIQTMECSLRVPETVSAATQTIKNVCEQGTSTVDQNFQKQDATVQTER
GSGEKPV SAPGDDTESLHSQGEEEFDMPQPPHGHVLRHRMRTIREVRTLVTRVITDVYYVDGTEVERKVTEETEE
PIVECQECETEVSPSQTGSSGDLGDISSFSKASSLHRTSSGTSLSAMHSSGSSGKGAGPLRGKTSGETPADFA
LPSSRGGPGKLSPRKGVSTGTGPVCEEDGDAGLGIRQGGKAPVTPRGRGRGRPPSRTTGTRETAVPGPLGIEDI
SPNLSRDDKSF SRVVRVPDSTRRTDVGAGALRRSDSPEIPFQAAAGP SDGLDASSPGNSFVGLRVVAKWSSNGY
FYSGKITRDVGAGKYKLLFDDGYECDVLGKDILLCDPIPLDTEVTALSEDEYF SAGVVKGHRKESGELYYSIEKE
GQRKWKYKRAVILSLEQGNRLREQYGLGPYEAVTPLTKAADISLDNLVEGKRKRKRSNVSSPATPTASSSSSTPT
RKITESPRASMGVLSGKRKLITSEEERSPAKRGRKSATVKPGAVGAGEFVSPCESGDNTGEP SAELEQRGPLPLN
KTLFLGYAFLLTMTTSDKLASRSKLPDGPTGSSEEEEFLEIPPFNKQYTESQLRAGAGYILEDNFNEAQCNTAY
QCLLIADQHCRTRKYFLCLASGIPCVSHVWVHDSCHANQLQNYRNYLLPAGYSLEEQRILDWQPRENPFQNLKVL
LVSDQQQNFLELWSEILMTGGAASVKQHHSSAHNKDIALGVFDVVVTDPSCPASVLKCAEALQLPVVSQEWVIQC
LIVGERIGFKQHPKYKHDYVSH

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FIGURE 4172

CCGGCTCCCATTCGGGCTCCAGCCTCCAATCCGACCCCCATTTGGGCTGCAGCCTCGGACCTAGCTCCGGCCCTC
GGTCTATCCGGTTGCATCCTCCCTCCCTGTTCCGGATCTTATCTTGCGCCAGCGCCTACTCCAGGATCCCGTAGC
CAGACCTCAAGCCATGGCTGGTCCCTTCTCCCGTCTGCTGTCCGCCCGCCCGGGACTCAGGCTCCTGGCTTTGGC
CGGAGCGGGGTCTCTAGCCGCTGGGTTTCTGCTCCGACCGGAACCTGTACGAGCTGCCAGTGAACGACGGAGGCT
GTATCCCCGAGCGCTGAGTACCCAGACCTCCGAAAGCACAACTGCATGGCCAGTACCTGACCCAGCAGT
CTATGCACGGCTCTGCGACAAGACCACACCCACTGGTTGGACGCTAGATCAGTGTATCCAGACTGGCGTGGACAA
CCCTGGCCACCCCTTCATCAAGACTGTGGGCATGGTGGCTGGAGATGAGGAGACCTATGAGGTATTTGCTGACCT
GTTTGACCTGTGATCCAAGAGCGACACAATGGATATGACCCCCGGACAATGAAGCACACCACGGATCTAGATGC
CAGTAAAATCCGTTCTGGCTACTTTGATGAGAGGTATGTATTGTCCTCTAGAGTCAGAACTGGCCGAAGCATCCG
AGGACTCAGTCTGCCTCCAGCTTGCACTCGAGCAGAGCGACGAGAGGTGGAACGTGTTGTGGTGGATGCACTGAG
TGGCCTGAAGGGTGACCTGGCTGGACGTTACTATAGGCTCAGTGAGATGACAGAGGCTGAACAGCAGCAGCTTAT
TGATGACCACTTTCTGTTTGATAAGCCTGTGTCCCGTTGCTGACTGCAGCAGGAATGGCTCGAGACTGGCCAGA
TGCTCGTGGAATTTGGCACAACAATGAGAAGAGCTTCCTGATCTGGGTGAATGAGGAGGATCATACACGGGTGAT
CTCCATGGAGAAGGGTGGTAACATGAAGAGAGTGTTTGAAAGATTCTGCCGAGGCCTCAAAGAGGTGGAGAGACT
TATCCAAGAACGTGGCTGGGAGTTTATGTGGAATGAGCGTTTGGGATACATCTTGACCTGTCCATCTAACCTGGG
CACTGGACTTCGGGCAGGAGTGCACATCAAACCTGCCCCTGCTAAGCAAA GATAGCCGCTTCCCAAAGATCCTGGA
GAACCTAAGACTCCAAAAACGTGGTACTGGAGGAGTGGACACTGCTGCTACAGGCGGTGTCTTTGATATTTCTAA
TTTGGACCGACTAGGCAAATCAGAGGTGGAGCTGGTGCAACTGGTCATCGATGGAGTAACTATTTGATTGATTG
TGAACGGCGTCTGGAGAGAGGCCAGGATATCCGCATCCCCACACCTGTCATCCACACCAAGCATTAAC TCCCCAT
CGCCAGCTGATGACTCAAGATTCCCAGGAGTTTTGCTCATTCTAATGATGGCCCATTCTACTTGCTCTGGACCTG
CCCCGCATCCCCTGCCTCCATCCTAGT

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FIGURE 4173

MAGPFSRLLSARPGRLRLALAGAGSLAAGFLLRPEPVRAASERRRLYPPSAEYPDLRKHNNCMASHLTPAVYARL
CDKTTPTGWTLDQCIQTGVDPNGHPFIKTVGMVAGDEETYEVFADLFDVPIQERHNGYDPRTMKHTTDL DASKIR
SGYFDERYVLSSRVRTGRSIRGLSLPPACTRAERREVERVVVDALSGLKGDLAGRYRLSEMTEAEQQQLIDDHF
LFDKPVSPLLTAAGMARDWPDARGIWHNNEKSFLIWVNEEDHTRVISMEKGGNMKRVFERFCRGLKEVERLIQER
GWEFMWNERLGYILTCP SNLGTGLRAGVHIKLP LLSKDSRFPKILENLRLQKRGTTGGVDTAATGGVFDISNLDRL
GKSEVELVQLVIDGVNYLIDCERRLERGQDIRIPTPVIHTKH

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FIGURE 4174

[illegible]

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FIGURE 4175

MRLRRLALFPGVALLLAAARLAAASDVLELTDDNFESRISDTGSAGLMLVEFFAPWCGHCKRLAPEYEAAAATRLK
GIVPLAKVDCTANTNTCNKYGVSGYPTLKIFRDGEEAGAYDGPRTADGIVSHLKKQAGPASVPLRTEEEFKKFIS
DKDASIVGFFDDSFSEAHSEFLKAASNLRDNYRFAHTNVESLVNEYDDNGEGIILFRPSHLTNKFEDKTVAYTEQ
KMTSGKIKKFIQENIFGICPHMTEDNKDLIQGKDLLIAYYDV DY EKNAKGSNYWRNRVMMVAKKFLDAGHKLNFA
VASRKTFSHELSDFGLESTAGEIPVVAIRTAKEKFVMQEEFSRDGKALERFLQDYFDGNLKRYLKSEPI PESND
GPVKVVVAENFDEIVNNENKDV LIEFYAPWCGHCKNLEPKYKELGEKLSKDPNIVIAKMDATANDVPSPYEVRGF
PTIYFSPANKKLNPKKYEGGRELSDFISYLQREATNPPVIQEEKPKKKKKKAQEDL

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FIGURE 4176

GGCACGAGGCGGGCCAACCGCCCGGACCTCGGCGCTTTCTTCTAGGATCCGCATGAATCGCTTTGGGCTATCGGA
AGAGCTATCCCCAGTTCTCGGGAGAAAGAGTCCGCGACCAGCGTCTGACCTCTCACTCAGAGTCCCCAGTCCTGC
CTTAGTTTTCCCCAGCGACCTGAATTTGGAGTTGCTGTCTCTAAGTGAAAGCTGAACCTGCAACCCCTTGAGGGT
TTCAGCCGCAGAGGGGCGGGAGAAAGGGCCTGGTTGGTAGGCGGGCTCAGCGGTTTCGCGCCAGTTAGCCCCGAG
CTTCGGAGACCCGAGAGACCAGAGGATGGCTGACACGAAGGGGCACCCGAGACAGCGCCTGGGCTTTTTCCCGCC
CGCGGTTCCACCGCTCTGAAACCGATTTCTAACAGAGAGAGACATAGTCTTGCTCTGTTACCCATGCTGGAGTAC
GGTGGCGAGATCACGACTCACTACAACCTTTGAATTCTTGATTCAAGCAATCCTCCCATCTCAGCCTCCTGAGTA
GCTAAGGACTACAGGGCGACTTTGTCAGTACCCCAAAGTGTCCCCGCATGAGGTCACTCTGCACGGTACGTGCT
CGAGCCCGCGGGAGCGCCACATCGCCAGCCGCACCCCTCCACCCCCACCCCTGCCACGTCACCCGGCCTAGTTTC
TCCAGGCCCCGTCCCTACGTCTCACTCGGGAAGCCCCGCCCCACGCTGAGCGCTCCGCCTGCGACCCCTCCGCCACT
TACCCACCCCGGCTCAAGCACGACCCGTGGATCCACGTGCTTTTTCTTGTCCAATGGGAGCCGGCTCCCGGGCGC
GAAGGGGCGGGGAGGAAAGGAACGACTGTGCTACGTTGCCAGAAGGGGCGGGACCTGCAACGTCCGACAGAACGA
GGGGACGTAACGGAGGCAGGTTGGAGCCGCTGCCGTGCCATGACCCGCGGTAACCAGCGTGAGCTCGCCCGCCA
GAAGAATATGAAAAAGCAGAGCGACTCGGTTAAGGGAAAGCGCCGAGATGACGGGCTTTCTGCTGCCGCCCGCAA
GCAGAGGGACTCGGAGATCATGCAGCAGAAGCAGAAAAAGGCAACGAGAAGAAGGAGGAACCCAAGTAGCTTTG
TGGCTTCGTGTCCAACCCCTCTTGCCCTTCGCCTGTGTGCCTGGAGCCAGTCCCACCACGCTCGCGTTTCTCTCTG
TAGTGCTCACAGGTCCCAGCACCGATGGCATTCCCTTTGCCCTGAGTCTGCAGCGGGTCCCTTTTGTGCTTCCTT
CCCCCTCAGGTAGCCTCTCTCCCCCTGGGCCACTCCCGGGGGTCAGGGGGTTACCCCTTCCCAGTGTTTTTTATTC
CTGTGGGGCTCACCCCAAAGTATTAAAAGTAGCTTTGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4177

MTGFLLPASRGTRRSCSRSRKRQTRRRRNPSSEFVASCPTLLPFACVPGASPTTLAFPPVVLGTGPSTDGIPFALS
LQRVFFVLPSQVASLPLGHSRG

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FIGURE 4178

GGCACGAGCCGAGATGCTCTCGCTCCGTGGCCTTAGCTGTGCTCGCGCTACTCTCTCTTTCTGGCCTGGAGGCTAT
CCAGCGTACTCCAAAGATTCAAGTTTACTCACGTCATCCAGCAGAGAATGGAAAGTCAAATTCCTGAATTGCTA
TGTGTCTGGGTTTCATCCATCCGACATTGAAGTTGACTTACTGAAGAATGGAGAGAGAATTGAAAAAGTGGAGCA
TTCAGACTTGCTTTTCAGCAAGGACTGGTCTTTCTATCTCTTGCTACTACACTGAATTCACCCCCACTGAAAAAGA
TGAGTATGCCGTGCCGTGTGAACCATGTGACTTTGTCCAGCCCCAAGATAGTTAAGTGGGATCGAGACATGTAAGC
AGCATCATGGAGGTTTGAAGATGCCGCATTGGATTGGATGAATTCCAAATTCGCTTGCTTGCTTTTTAATATT
GATATGCTTATACACTTACACTTTATGCACAAAAATGTAGGGTTATAATAATGTTAACATGGACATGATCTTCTTT
ATAATTCTACTTTGAGTGCTGTCTCCATGTTTGATGTATCTGAGCAGGTTGCTCCACAGGTAGCTCTAGGAGGGC
TGGCAACTTAGAGGTGGGGAGCAGAGAATTCTCTTATCCAACATCAACATCTTGGTCAGATTTGAACTCTTCAAT
CTCTTGCACTCAAAGCTTGTTAAGATAGTTAAGCGTGCATAAGTTAACTTCCAATTTACATACTCTGCTTAGAAT
TTGGGGGAAAATTTAGAAATATAATTGACAGGATTATTGGAAATTTGTTATAATGAATGAAACATTTTGTATAT
AAGATTCATATTTACTTCTTATACATTTGATAAAGTAAGGCATGGTTGTGGTTAATCTGGTTTATTTTTGTTCCA
CAAGTTAAATAAATCATAAACTTG

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FIGURE 4179

MSRSVALAVLALLSLSGLEAIQRTPKIQVYSRHPAENGKSNFLNCYVSGFHPSDIEVDLLKNGERIEKVEHSDLS
FSKDWSFYLLYYTEFTPTEKDEYACRVNHVTL SQPKIVKWDRDM

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FIGURE 4180

GTATATATGTGATTCAGATATGTATTTCTGACTTGAAGTGAAATATGCTGGAAAACTCACACAACATATGGGAGAA
CTATCCTATCCCTGAACCAGGCCCAAATGAGGTCTTGCTGAGGATGCATTCTGTTGGAATCTGTGGCTCAGATGT
CCACTACTGGGAGTATGGTCGAATTGGGAATTTTATTGTGAAAAAGCCCATGGTGCTGGGACATGAAGCTTCGGG
AACAGTCGAAAAAGTGGGATCATCGGCAAAGCACCTAAAACCAGGTGATCGTGTTGCCATCGAATCTGGTGCTCC
CCGAGAAAATGATGAATTCGCAAGATGGGCCGATACAATCTGTACCTTCCATCTTCTTCTGTGCCACACCCCC
CGATGATGGGAACCTCTGCCGGTTCATAAGCACAAATGCAGCCTTTTGTACAAAGCTTCCTGACAATGTACCTT
TGAGGAAGGCGCCCTGATTGATCCACTTTCTGTGGGGATCCATGCCTGCAGGAGAGGCGGAGTTACCCTGGGACA
CAAGGTCCTTGTGTGTGGAGCTGGGGCAATCGGGGTAGTCACTTTGCTCGTGGCCAAGGCAATGGGAGCAGCTCA
AGTAGTGGTGACTGATCTGTCTGCTACCCGATTGTCCAAAGCCAAGGAGATTGGGGCTGATTTAGTCCTCCAGAT
CTCCAAGGAGAGCCCTCAGGAAATCGCCAGGAAAGTAGAAGGTCTGCTGGGGTGCAAGCCGGAAGTCACCATCGA
GTGCACGGGGCAGAGGCCTCCATCCAGGCAGGCATCTACGCCACTCGCTCTGGTGGGAACCTCGTGCTTGTGGGG
CTGGGCTCTGAGATGACCACCGTACCCCT

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FIGURE 4181

MHSVIGICGSDVHYWEYGRIGNFIVKKPMVLGHEASGTVEKVGSSAKHLKPGDRVAIESGAPRENDEFCKMGRYNL
SPSIFFCATPPDDGNLCRFYKHNAFCYKLPDNVTFEEGALIDPLSVGIHACRRGGVTLGHKVLVCGAGAIGVVT
LLVAKAMGAAQVVVTDLSATRLSKAKEIGADLVLQISKESPQEIARKVEGLLGCKPEVTIECTGQRPPSRQASTP
LALVGTSCILGWALR

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FIGURE 4182

CGCACGGCCGCGCAGATCTGTCTTGCTGGAAGCTTTTTCTAGAGGTTGAGCGGTTTGCACAATGTCGGAAATGG
CTGAGTTGTCCGAGCTGTATGAAGAGAGCAGTGACCTGCAGATGGATGTGATGCCTGGCGAGGGTGACCTTCCGC
AGATGGAGGTAGGCAGCGGGAGCCGGGAGCTATCCCTGCGTCCCTCCCGCAGCGGGGCCCAACAGCTCGAGGAGG
AAGGCCCAATGGAGGAGGAGGAGGCCAGCCAATGGCGGCGCCAGAGGGGAAACGGAGCCTTGCTAACGGGCCCA
ACGCTGGGGAGCAGCCAGGCCAGGTGGCGGGCGCAGACTTCGAGAGCGAGGACGAGGGCGAGGAATTTGATGACT
GGGAGGACGACTACGACTATCCCGAAGAGGAGCAGCTCAGTGGTGCCGGCTACAGAGTATCAGCCGCTCTTGAAG
AAGCCGACAAGATGTTTCTGAGAACAAGAGAACCAGCCCTGGATGGCGGGTTTCAGATGCATTATGAGAAGACCC
CGTTTGATCAGTTAGCTTTTATCGAAGAGCTTTTTTCACTGATGGTTGTCAATCGTCTGACCGAAGAACTCGGCT
GTGATGAGATTATTGATAGAGAGTAGTTAGATGCTGTTAAAAGAGGAGGAAACTACTTGAGGAGGGACCCAACCTT
TCCGCTATCTTTGGGTTTCAATCCAAATAGTTTTGTGCCATTGAAAACTTGACCTTCAAAAAATTTGTTTTTC
AGAATAGAACACAATAGGACAGTGACTGCACAGTTGTGAAAAGGAAGAGAATCATTAAAGAAAAAGAAAAAGA
TTTTAAGACCGTTGAAATCAATTATCAAGAACGTCCTAAACACCTATGGCTTTGACTTTGTTATTGATCCAGAT
TATTTTCCTTGCAATTGGGGAAAAATATCTTTCATATTTGTTTGCTGTAAAGATGGTTTTGCAAGAATAAGTCATGA
CCAAGACAACTGCCAATACAAAAGCCCACTGATACTAATTATATAATGAGAAAAAATGTATCCAAGTGGACA
CATATCTTTTGAGTTATTTGGACTGAAAGCTTAAGAAAACCTTGAAAAATCTATTTTGTGATCTAGTCAAGCCAC
AGTTATCAAAGGCTACATTTTCAGTGTAAGATAAATGGATGAGTAACTCAAATATGTATCACGTGTGCTTTGTA
TCTTAAGATGTGTTTCCAAGAGCATCTGAAATTTTGTGTTGTACATGTATCTTGATCATTTATAAAGCCACTGTGA
TCTATAAATCAAGAAAATCCATTGTCATAACCATTTTTAAAAGTCAAAAATTAAGACATCCTTAATTAAGGTT
TCAAACTAGACACTAAATGTGTGTGAATGTACAAAGAAAACAAACCATTGCTTATGCTGTTATATACTAGAGAA
ATTTTGTTTTGCTTGCTGTTTTAACTTGACAGATGAAGGACTTTAGTTGAACCTTCATATTGTAAGAAGTGTAAAT
AAAAGTTGTCAAGTAAAAAGCGCTATATCTAAAAGACTTTATGAACAGTTATTCTATCAACTTTTAAAGGTTTT
AAACCTGCCCAGAAATACCTTGGTATCTGAAGTTTCCCTCTGTCTCCTCCTCTAATTAAGCTTGTTATTTGTCA
TGCACCAGCATTGGAGATAATAAAATTTCTTGTTCTGTGTAAAAA

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FIGURE 4183

MSEMAELSELYEESDLQMDVMPGEGDLPQMEVGSGSRELSLRPSRSGAQQL EEGPMEEEAQPMAAPEGKRSL
ANGPNAGEQPGQVAGADFESEDEGEFDDWEDDYDYPEEEQLSGAGYRVSAALEEADKMFLRTREPALDGGFQMH
YEKTPFDQLAFIEELFSLMVVNRLTEELGCDEIIDRE

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FIGURE 4184A

GAGCCCCGCCCCGGGGACGGGCGGCGGGATAGCGGGACCCCCGGCGGCGCGGTGCGCTTCAGGGCGCAGCGGCGGC
CGCAGACCGAGCCCCGGGCGCGGCAAGAGGCGGCGGGAGCCGGTGCGGCTCGGCATCATGCGTCGAGGGCGTCT
GCTGGAGATCGCCCTGGGATTACCGTGCTTTTAGCGTCCTACACGAGCCATGGGGCGGACGCCAATTTGGAGGC
TGGGAACGTGAAGGAAACCAGAGCCAGTCGGGCCAAGAGAAGAGGCGGTGGAGGACACGACGCGCTTAAAGGACC
CAATGTCTGTGGATCACGTTATAATGCTTACTGTTGCCCTGGATGGAAAACCTTACCTGGCGGAAATCAGTGTAT
TGTCCCCATTTGCCGGCATTCCCTGTGGGGATGGATTTTGTTCGAGGCCAAATATGTGCACTTGCCCATCTGGTCA
GATAGCTCCTTCCTGTGGCTCCAGATCCATACAACACTGCAATATTTCGCTGTATGAATGGAGGTAGCTGCAGTGA
CGATCACTGTCTATGCCAGAAAGGATACATAGGGACTCACTGTGGACAACCTGTTTGTGAAAGTGGCTGTCTCAA
TGGAGGAAGGTGTGTGGCCCCAAATCGATGTGCATGCACTTACGGATTTACTGGACCCCACTGTGAAAGAGATTA
CAGGACAGGCCCCATGTTTTACTGTGATCAGCAACCAGATGTGCCAGGGACAACCTCAGCGGGATTGTCTGCACAAA
AACGCTCTGCTGTGCCACAGTCGGCCGAGCCTGGGGCCACCCCTGTGAGATGTGCTCTGCCAGCCTCACCCCTG
CCGCCGTGGCTTCATTCCAAATATCCGCACGGGAGCTTGTCAAGATGTGGATGAATGCCAGGCCATCCCCGGGCT
CTGTACAGGGAGGAAATGCAATTAATACTGTTGGGTCTTTTGAGTGCAAATGCCCTGCTGGACACAACTTAATGA
AGTGTCAAAAAATGTGAAGATATTGATGAATGCAGCACCATTCTCGGAATCTGTGAAGGGGGTGAATGTACAAA
CACAGTCAGCAGTTACTTTTGCAAATGTCCCCCTGGTTTTTACACCTCTCCAGATGGTACCAGATGCATAGATGT
TCGCCCAGGATACTGTTACACAGCTCTGACAAACGGGCGCTGCTCTAACCAGCTGCCACAGTCCATAACCAAAT
GCAGTGTCTGTGTGATGCCGGCCGATGTGGTCTCCAGGGGTCACTGTGCCCCCTGAGATGTGTCCCATCAGAGC
AACCGAGGATTTCAACAAGCTGTGCTCTGTTCTATGGTAATTCTTGGGAGACCAGAATATCTCCCCCACCCCT
TGGCCCCATTCCCTCCAGTTCTCCCTGTTCTCTCTGGCTTTCTCTCTGGACCTCAAATTCGGTCCCTCGACCACC
AGTGAATATCTGTATCCATCTCGGGAGCCACCAAGGGTGTGCCAGTAAACGTTACTGATTACTGCCAGTTGGT
CCGCTATCTCTGTCAAAATGGACGCTGCATTCCAACCTCTGGGAGTTGCCGGTGTGAGTGCAACAAAGGGTTCCA
GCTGGACCTCCGTGGGGAGTGTATTGATGTTGATGAATGTGAGAAAAACCCCTGTGCTGGTGGTGAAGTATTAA
CAACCAGGGTTCTGTACACCTGTGAGTCCGAGCTGGATATCAGAGCACACTCACGCGGACAGAATGCCGAGACAT
TGATGAGTGTTTACAGAATGGCCGGATCTGCAATAATGGACGCTGCATCAACACAGATGGCAGTTTTTCATTGCGT
GTGTAATGCGGGCTTTTCATGTTACACGAGATGGGAAGAAGTGTGAAGATATGGATGAATGCAGCATAAGGAACAT
GTGCCTTAATGGAATGTGTATCAATGAAGATGGCAGTTTTTAAATGTATTTGCAAACCTGGATTCCAGCTGGCATC
AGATGGACGTTATTGCAAAGACATTAACGAGTGTGAAACCCCTGGGATCTGCATGAATGGGCGTTGCGTCAACAC
TGATGGCTCCTACAGATGTGAATGCTTCCCTGGACTGGCTGTGGGTCTGGATGGCCGTGTGTGTGTTGACACACA
CATGCCGAGCACATGCTATGGTGGATACAAGAGAGGGCCAGTGTATCAAACCTTTGTTTGGTGTGTCACTAAATC
TGAATGCTGTTGCGCCAGCACTGAGTATGCATTTGGGGAACCTTGCCAGCCGTGTCTTGCACAGAAATCAGCGGA
ATATCAGGCACTCTGCAGCAGTGGGCCAGGAATGACGTCAGCAGGCAGTGATATAAATGAATGTGCACTAGATCC
TGATATTTGCCCAAATGGAATCTGTGAAAACCTTCGTGGGACCTATAAATGTATATGCAATTCAGGATATGAAGT
GGATTCAACTGGGAAAAACTGCGTTGATATTAATGAATGTGTACTGAACAGTCTCCTTTGTGACAAATGGACAATG
TAGAAATACTCCTGGAAGTTTTGTCTGTACCTGCCCCAAGGGATTTATCTACAAACCTGATCTAAAAACATGTGA
AGACATTGATGAATGCGAATCAAGTCTTGCATTAATGGAGTCTGCAAGAACAGCCAGGCTCTTTTATTTGTGA
ATGTTCTTCTGAAAGTACTTTGGATCCAACAAAAACCATCTGCATAGAAACCATCAAGGGCACTTGCTGGCAGAC
TGTCATTGATGGGCGATGTGAGATCAACATCAATGGAGCCACCTTAAAGTCCCAGTGCTGCTCCTCCCTCGGTGC
TGCGTGGGGAAGCCCGTGCACCCTATGCCAAGTTGATCCCATATGTGGTAAAGGGTACTCAAGAATTAAAGGAAC
ACAATGTGAAGATATAGATGAATGTGAAGTGTTCAGGAGTGTGTAAAAATGGCCTGTGTGTTAACACTAGGGG
GTCATTCAAGTGTGAGTGTCCAGTGAATGACTTTGGATGCCACAGGAAGGATCTGTCTTGATATCCGCCTGGA
AACCTGCTTCTGAGGTACGAGGACGAGGAGTGACCCCTGCCTATTGTGCGCCGCCACCGCATGGACGCTGCTG
CTGCTCCGTCGCGGCGAGCCTGGGGTACTGAGGAATGCGAGGAGTGTCCCATGAGAAATACTCCTGAGTACGAGGA
GCTGTGTCCGAGAGGACCCGGATTTGCCACAAAAGAAATTACAAATGGAAAGCCTTTCTTCAAAGATATCAATGA
GTGCAAGATGATACCCAGCCTCTGCACCACGGCAAGTGCAGAAACACCATTTGGCAGCTTTAAGTGCAGGTGTGA
CAGCGGCTTTGCTCTTGATTCTGAAGAAAGGAAGTGCACAGACATTGACGAATGCCGCATATCTCCTGACCTCTG
TGGCAGAGGCCAGTGTGTGTAACACCCCTGGGGACTTTGAATGCAAGTGTGACGAAGGCTATGAAAGTGGATTCA
GATGATGAAGAAGTGCATGGATATTGATGAGTGTGAGAGAGATCCTCTCCTATGCCGAGGTGGTGTGTTGCCATAA
CACAGAGGGAAGTTACCGCTGTGAATGCCCGCTGGCCATCAGCTGTCCCCAACATCTCCGCGTGTATCGACAT

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FIGURE 4184B

CAATGAATGTGAGCTGAGTGCACACCTGTGCCCAATGGCCGTTGCGTGAACCTCATAGGGAAGTATCAGTGTGC
CTGCAACCCTGGCTACCATTCAACTCCCGATAGGCTATTTTGTGTTGACATTGATGAATGCAGCATAATGAATGG
TGGTTGTGAAACCTTCTGCACAACTCTGAAGGCAGCTATGAATGTAGCTGTGAGCCGGGATTTGCACTAATGCC
TGACCAGAGATCATGCACCGACATCGATGAGTGTGAAGATAATCCCAATATCTGTGATGGTGGTCAGTGCACAAA
TATCCCTGGAGAGTACAGGTGCTTGTGTTATGATGGATTTCATGGCATCTGAAGACATGAAGACTTGTGTAGATGT
CAATGAGTGTGACCTGAATCCAAATATCTGCCAAAGTGGGACCTGTGAAAAACAGAAAGGCTCATTTATCTGCCA
CTGTGATATGGGCTACTCCGGCAAAAAAGGAAAACTGGCTGTACAGACATCAATGAATGTGAAATTGGAGCACA
CAACTGTGGCAAACATGCTGTATGTACCAATACAGCAGGAAGCTTCAAATGTAGCTGCAGTCCCGGGTGGATTGG
AGATGGCATTAAAGTGCAGTGTCTGGACGAATGTTCCAATGGAACCCATATGTGCAGCCAGCATGCAGACTGCAA
GAATACCATGGGATCTTACCGCTGTCTGTGCAAGGAAGGATACACAGGTGATGGCTTCACTTGTACAGACCTTGA
TGAGTGCTCTGAGAACCTGAATCTCTGTGGCAATGGCCAGTGCCCTCAATGCACCAGGAGGATACCGCTGTGAATG
CGACATGGGCTTCGTGCCAGTGCTGACGGGAAAGCCTGTGAAGATATTGATGAGTGCTCCCTTCCGAACATCTG
TGTCTTTGGAACCTGCCACAACCTCCCTGGCCTGTTCCGCTGTGAGTGTGAGATAGGCTACGAACTGGACAGAAG
CGGCGGGAACCTGCACAGATGTGAATGAATGCCCTGGATCCAACCACGTGCATCAGTGGGAACCTGTGTCAACACTCC
AGGCAGCTATATCTGTGACTGCCACCTGATTTTGAACGAACCAACTCGAGTTGGCTGTGTGATACCCGCTC
TGGAAATTGCTATTTGGATATTGACCTCGAGGAGACAATGGAGATACAGCCTGCAGCAATGAAATTGGAGTTGG
TGTTTCCAAAGCTTCTGCTGCTGTTCTCTGGGTAAAGCCTGGGGTACTCCTTGTGAGATGTGTCTGCTGTGAA
CACATCCGAGTACAAAATTCTTTGTCTGGAGGGGAAGGTTTCCGACCAATCCTATCACCGTTATATTGGAAGA
TATTGATGAGTGCCAGGAGCTACCAGGGCTGTGCCAAGGAGGAAAATGTATCAACACCTTTGGGAGTTTCCAGTG
CCGCTGTCCAACCGGCTACTACCTGAATGAAGATACACGAGTGTGTGATGATGTGAATGAATGTGAGACTCCTGG
AATCTGTGGTCCAGGGACATGTTACAACACCGTTGGCAACTACACCTGTATCTGTCTCCAGACTACATGCAAGT
GAATGGGGGAAATAATTGCATGGATATGAGAAGAAGTTTGTGCTACAGAACTACTATGCTGACAACCCAGACCTG
TGATGGAGAATTGTTATTCAACATGACCAAGAAGATGTGCTGCTGTTCTTCAACATTGGCCGGGCGTGGAACAA
GCCCTGTGAACAGTGTCCCATCCAAGTACAGATGAGTTTGCTACACTCTGTGGAAGTCAAAGGCCAGGCTTTGT
CATCGACATTTATACCGGTTTACCCGTTGATATTGATGAGTGCCGGGAGATCCCAGGGGTCTGTGAAAATGGAGT
GTGTATCAACATGGTTGGCAGCTTCCGATGTGAATGTCCAGTGGGATTCTTCTATAATGACAAGTTGTTGGTTTG
TGAAGATATTGACGAGTGTGAGAACGGCCAGTGTGCCAGCGCAACGCCGAATGCATCAACACTGCAGGCAGCTA
CCGCTGTGACTGTAAAGCCCGGCTACCGCTTACCTCCACAGGACAGTGCAATGATCGTAATGAATGTCAAGAAAT
CCCCAATATATGAGTCATGGGCAGTGCATTGACACAGTTGGAAGCTTTTATTGCCTTTGCCACACTGGTTTTAA
AACAAATGATGACCAACCATGTGCTTGGACATAAATGAATGTGAAAGAGATGCCCTGTGGGAATGGAACCTTGCCG
GAACACAATTGGTTTCCTTCAACTGCCGCTGCAATCATGGTTTTCATCCTTTCTCACAACAATGACTGTATAGATGT
TGATGAATGTGCAAGTGGAATGGGAATCTTTGCAGAAATGGCCAATGCATTAATACAGTGGGGTCTTTCCAGTG
CCAGTGCAATGAAGGCTATGAGGTGGCTCCAGATGGGAGGACCTGTGTGGATATCAATGAATGTCTTCTAGAACC
CAGAAAATGTGCACCAGGTACCTGTCAAACTTTGGATGGGTCTACAGATGCATTTGCCACCTGGATACAGTCT
TCAAAATGAGAAGTGTGAAGATATTGATGAGTGTGTGCAAGAGCCAGAAATTTGTGCCCTGGGCACATGCAGTAA
CACTGAAGGCAGCTTCAAATGTCTGTGTCCAGAAGGTTTTCCTTGTCTCCTCAGTGGAAGAAGGTGCCAAGATTT
GCCAATGAGCTACTGTTATGCGAAGTTTGAAGGAGGAAAGTGTTTCATCACCCAAATCCAGAAATCACTCCAAGCA
GGAATGCTGCTGTGCCTTGAAGGGAGAAGGCTGGGGAGACCCCTGCGAGCTCTGCCCCACGGAACCTGATGAGGC
CTTCCGCCAGATATGTCCTTATGGAAGTGGGATCATCGTGGGACCTGATGATTCAGCAGTTGATATGGACGAATG
CAAAGAACCCGATGTCTGTAAACATGGACAGTGCATCAATACAGATGGTTCTATCGCTGCGAGTGTCCCTTTGG
TTATATTCTAGCAGGGAATGAATGTGTAGATACTGATGAATGTTCTGTGGCAATCCTTGTGGAAATGGAACCTG
CAAGAATGTGATTGGAGGTTTTGAATGCACCTGCGAGGAGGGATTTGAGCCCGGTCCAATGATGACATGTGAAGA
TATAAATGAATGTGCCCAGAATCCTCTGCTCTGTGCCCTCCGATGTGTGAACACTTATGGGTCAATGAATGCAA
ATGTCCCGTGGGATATGTGCTCAGAGAAGACCGTAGGATGTGCAAAGATGAGGATGAGTGTGAAGAGGGGAAAACA
TGACTGTACTGAAAAACAAATGGAATGCAAGAACCTCATTGGCACATATATGTGCATCTGTGGACCCGGGTATCA
GCGGAGACCTGATGGAGAAGGCTGTGTAGATGAGAATGAATGTGACAGCAAGCCAGGGATCTGTGAGAATGGGCG
CTGCCTCAACACCCGTGGGAGCTACACCTGTGAGTGTAAATGATGGGTTTTACCGCCAGCCCCAACAGGACGAGTG
CCTTGACAAATCGGGAAGGGTACTGCTTACAGAGGTGCTACAAAACATGTGTGATCGGCTCCAGCAACAGGAA